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Annual Meeting at Webster Springs, July 10-11-12

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Original Articles

A BREATH.

G. W. Swimley, M.D.,
Bunker Hill, W. Va.

(Read at meeting of the Eastern Panhandle Medical Society, March 6, 1912.)

What is a breath? The majority of people never know they ever take a breath. It is automatic—that is, it does itself; were it not so arranged, many persons would cease to exist, because they would not have sufficient energy to make an effort to prolong their lives to one-half the Osler limit.

A breath is a respiration, a respiration is the act of drawing air into and expelling it from the lungs; it is simply the act of breathing; it is a part of the life of all organisms, animal and vegetable. All nature takes a breath at regular intervals, even the ocean takes two breaths daily.

In man a breath consists of mechanical and chemical phenomena; the mechanical phenomena are the acts of inspiration and of expiration, and the chemical phenomena consist of the formation of a certain quantity of carbonic acid, the absorption of a part of the oxygen of the air, and the disengagement of a quantity of water in the state of vapor.

A breath—a respiration—is a function by which air is introduced into the bodies of living beings for the support of nutritive activity, bringing the blood in contact with the atmospheric air in order that it may acquire the vivifying qualities. Life in an individual is in proportion to his breathing power. The respiratory mechanism consists of the lungs, which occupy the thoracic cavity, extending from the level of the first rib downward to the diaphragm. They consist of a series of minute air-chambers with a network of capillaries in the wall, the air-passages from the air-chambers of the lungs to the outer air, and the chest walls with their muscles, which act like bellows and change the air in the lungs. This great breathing organ is composed of several hundred thousand air-cells, each of which is one one-hundredth of an inch in diameter, giving a surface, in the lungs of a man with a fully developed chest, of 2000 square feet, or a surface of 45 feet square. This surface is covered by a thin membrane, which separates the air on one side from the flowing blood on the other side. Through this delicate membrane passes the oxygen into the blood, giving it new life, with full energy and strength to supply the demand for constant repair—the carbonic acid passing out by expiration. How often does a man in a normal condition breathe per minute? The average number of respirations per minute is found by counting on persons sitting quietly and not knowing that their breathing rate is under observation, and is about fifteen per minute. The number of respirations per minute will vary according to the age and physical condition of the person. In each breath 30 cubic inches of air is concerned, and the

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quantity of air breathed in twenty-four hours by a man of normal stature, say five feet eight inches, varies from 350 cubic feet to 375 cubic feet; also daily there is absorbed, by the 2000 square feet of lung surface, 20 cubic feet of oxygen, which is in constant demand to establish an equilibrium of supply and waste.

Having considered the breathing apparatus, we will now view the act or process of breathing, which has been too long neglected, and which may be divided as follows: (1) The act of inspiration; (2) the act of expiration in singing; (3) the act of expiration in speaking; (4) the breathing gymnastics. The first and last are those in which we are most interested. More definitely, we have the clavicular or high breathing—often called high chest breathing—the costal or rib breathing, the diaphragm breathing, and the full diaphragm breathing, or the full breath with the combined breathing muscles.

The clavicular breathing is the method of expanding principally the chest. It is a bad habit. Of all the methods of breathing this method furnishes the smallest amount of air with the greatest effort, yet it is by far the most common. In costal breathing the diaphragm is extended, and in consequence the abdomen is drawn in. For the ordinary process of respiration diaphragm breathing is the best. In each of the above methods of breathing the lungs are only partly filled with air. The complete method of breathing is only found in the full breath, which includes diaphragmatic breathing—it is deep breathing. There are but few persons who know how to breathe. You will observe that people are to a great extent mouth-breathers. The mouth has no provision for sifting the air or cleaning it from impurties, such as dust, dirt, and microbes, which, entering through the mouth, will cause respiratory and lung diseases.

The Lord God made man of the dust of the ground, and breathed *into his nostrils* the breath of "lives"—a portion of the Universal Breath, in which "we live and move and have our being." The breathing through the nostrils is the correct way of breathing, as they are furnished with a safeguard consisting of two long rows and meandering channels, covered with bristly hairs, which act as filters and arrest whatever impurities the air might contain. The hygiene of the voice depends largely upon taking the breath through the nostrils. It is the natural and proper way. If the habit of breathing through the nostrils has been neglected, it can by perseverance be reestablished, and will be of much benefit to the breather.

Sometimes the question is asked, "Can a woman accustom herself to full diaphragmatic breathing?" Mr. Kofter says that a woman has a diaphragm as good and strong as a man has; the only thing against it is that deadly curse of civilization, the tight-laced corset. If woman would only throw away that unnatural thing—the tight-laced corset—she would be able to learn full diaphragmatic breathing with very little trouble, and with vast benefit to her health and natural development. The breathing power of man is an index of his endurance. An insurance examiner can soon approximate the days of the applicant—whether he be wound up for three score years or more, or whether his days be only one-half or one-third of the days allotted to man.

A breath may signify much upon many occasions. Given a case where a bundle of humanity is ushered into the world; it may be a long expected heir; there is an anxiety on the countenance of all present; a death-like stillness prevails. Presently an old grandmother places a hand upon the shoulder of the attendant, and in a subdued tone says: "Can he get his breath?" The doctor, being a prudent man, says not a word, but continues his efforts to bring a breath into the human form which lies before him. It may be an hour or more before he will hear the familiar cry; then they are all happy, and the news goes out that the new-born has got his breath. That one breath may be proof for the transfer of a fortune. The doctor now feels fully repaid for his extra efforts.

Every person carries about with him the physical indications of his longevity. A long-lived man may be distinguished from a short-lived person. In the animal as in the vegetable kingdom, each life takes its characteristic from the life from which it

sprung. In the lungs is the staying power that is always in demand, backed by an inherited and reserved vitality of resistance against the many evils to which flesh is heir. The capacity for living is called the "inherent" or "potential" longevity. Under favorable conditions and environment the individual should live out his potential longevity. There are two leading factors: the inherited potentiality, and the reactionary influence of environment. The primary conditions of longevity are, the lungs large and active, a large brain, a strong heart. If these organs are large, the trunk will be long and the limbs comparatively short. The person will appear tall in sitting and short in standing; the nostrils being large, open and free, indicate large lungs—a good breather. If the nostrils be pinched and half-closed, it indicates small and weak lungs.

In the Book of Proverbs we find this very significant passage: "The breath of man is the lamp of JEHOVAH, searching all the inward parts." The apostle Paul has it written thus: "He giveth to all life and breath." Finally, in the original text of John, it is written: "He breathed in (took a deep breath) and saith unto them, Receive ye the Holy Breath."

The person who takes regularly a deep breath, receiving a full supply of that vivifying agent, oxygen—which is free to all, without money and without price—is always filled full of energy, ready to execute orders, to become a leader or an important factor in any great enterprise. Ex-President Roosevelt is a fair sample of a deep breather. He enjoys being out in the air and taking in the life-giving element.

Walk out into the air these frosty mornings, throw back your shoulders, take in the pure ozone through the nostrils, hold it until every cell of the lungs is filled; hold it thirty seconds, then, by expiration, pass the air out through the mouth, while walking. Continue the exercise ten to fifteen minutes, and you will feel as if you had found the Fountain of Youth. The blood will go bounding through your system with beneficial results. It will give you a good circulation, which is the law of life. The circulation works in body, mind, and money. Following the above suggestions you can abort a cold, cure bronchial troubles, relieve indigestion, put a sluggish liver to work, strengthen the weak abdominal muscles, and thereby remove constipation, which is becoming characteristic of the American people; and thus you can remove the contents of the great human cess-pool, the colon—leaving the system free from the toxins which are causing many ills which take possession of the human body.

Throughout the country to-day is a great war against tuberculosis, known as the "Great White Plague." Of all diseases, it is the most widespread and destructive to human life. Millions die annually from this disease. It is not only an acquired disease, but surely preventable, and, in its early stages, curable. In the majority of cases it commences just beneath the collarbone, because here is the part of the lung least used—the reserve portion not much used in ordinary breathing. In most of the avocations of life the shoulders are drawn forward, thus cramping and weakening the lungs. There the bacilli find lodgment. A person with healthy lungs might inhale a million of tubercle bacilli daily with impunity. Hence the inference is plain: to prevent tuberculosis, strengthen the lungs fully by deep breathing many times daily. The real conditions that render tuberculosis possible are lack of tone, strength, action, vigor, power, vitality, efficiency and resistance in the lungs. It is impossible for tuberculosis to successfully attack a person whose lungs possess the qualities above enumerated. It is also proved that tuberculosis may be prevented by maintaining those qualities of the lungs if they already exist therein; or those qualities may be established if they do not already exist. In those persons in whom the disease has already developed, a line of treatment must be to establish the lacking qualities of the lungs.

What line of treatment shall be given to the patient who, not being financially able to go to higher altitudes, has all the prominent symptoms of tuberculosis? The patient is left to his choice to decide among the various cure-alls. Our good investigators into microbe life, germs, bacilli, bac-

teria, etc., are most interested in watching the effects of their various panaceas and modes of cure after the disease has developed. The patient will find the said nostrums put up in bottles, corked, and nicely labeled, with full directions for emergencies, prescribed and sold by every grocer in the country. Then there is the Koch anti-tubercular serum, which, aided by suggestion, has performed some cures. Then there is the outdoor life, living in tents on the mountain side. The latter form of treatment has given good results to many patients. In living in the high altitudes, is it the pure air or the rarefied air that brings favorable results? If the purity of the air is the only essential thing, patients need not go to high altitudes. There are many places in low altitudes where air is pure; if not, it may be rendered pure artificially. Again, persons having weak lungs going to the mountains to get pure and lighter air, are liable to hemorrhages, as the blood rushes into the capillaries with the removal of the atmospheric pressure

In the year 1908 Dr. Thomas G. McConkey advanced the theory that cancer and tuberculosis may be closely related. Admitting the above theory to be correct, why not eradicate cancer by the process of deep breathing? Yes, why not clean the human system of all its impurities, and let man live out the days allotted to him, which, according to Divine Word, are six score years. The man will live upon a higher plane of life, and sickness and affliction will be relegated to the past.

The present system of treating tuberculosis, which is on a commercial basis, and consists of having homes, sanatoria, and hospitals for the consumptive, is not a rational system, as it brings the afflicted together in groups or colonies, where association and environment are more against than in favor of beneficial results. But, as the plan is the best ever put in practice, much good may yet be accomplished. The only rational treatment of tuberculosis consists of deep breathing, and good nourishing food, with proper environment; which will bring to the patient a voracious appetite for the life essentials.

Deep breathing has many advantages. (1) Physical advantages—It builds up the physical constitution, makes strong the nerves and renders them proof against any ordinary assault. It energizes and quickens the breath of life. (2) Mental advantages—The mind and the body are so closely related that one cannot improve without the other. The mind becomes clear, strong, and vigorous, the imagination capable of viewing a higher plane of life. (3) Moral advantage—In this, deep breathing is a tonic to the moral nature, which lifts one up into a higher sphere, and charges him with purer and stronger vibrations. (4) Spiritual advantages—The spiritual and moral natures of man are so closely allied that it is hard to divide between them, and yet the whole secret of divine breathing lies in the fact that the breath enters into the spiritual inner man, the subliminal man.

How shall this be accomplished? Tuberculosis may be swept from the face of the earth within three or four generations, if it be stamped out of the young before it makes any headway. To do that, deep breathing exercises should be made compulsory. The daily practice of deep breathing, acquired in childhood, will make every human being whatever his tendency or ancestry, proof against the inroads of the bacillus of tuberculosis. There are three methods of breathing. The right method to teach the young is the long, deep breath, which is a combination of all three, beginning with the abdomen and ending with the upper chest. This method can be taught to a child in less than five minutes. It is just as easy to learn as the alphabet. Every school should have marked in its curriculum a place for deep breathing exercises, in both the forenoon and afternoon sessions. The educational institutions of to-day are making mental giants—and physical wrecks. Where is the popular educator who has sufficient vim to teach the simple, ordinary, every-day truth that tuberculosis is always preventable, and that every person may have the pleasing anticipation of enjoying the blessings that are in store for him, both in a vigorous and happy life and in a hale and hearty old age.

Catch you the vibrations?

RADIOSCOPY IN ABDOMINAL DIAGNOSIS.

Will A. Quimby, M.D., Wheeling, W.Va.

(Read before Ohio County Medical Society.)

The study of the abdominal viscera by radioscopy has opened a new field of investigation and reveals so much in connection with many obscure conditions which alters our former ideas, that it is now given a place of first importance as a diagnostic agent. From the radiologist's standpoint this may be considered the region of most interest at present, and as the diagnoses arrived at by this means are being so generally established by subsequent events, I believe some reference to one of the conditions frequently encountered, with a report of cases, will be of interest.

By the various methods employed by the radiologist we are able to accurately estimate the size, shape, position, movements and density of the organs, and from these data form quite accurate conclusions as to the ability of an organ to fulfil its physiological function, and as to the pathological processes in progress. For example, a local change in density may be sufficient to indicate abscess, whether it be sub-diaphragmatic, perinephritic, renal, hepatic or perityphlitic. This has frequently been the case when other means of diagnosis have utterly failed. Again, by the same means foreign bodies and abnormal deposits, as renal, ureteral, vesical and urethral calculi, as also phleboliths and occasionally biliary calculi and enteroliths are plainly shown.

By a study of the outline and motility during the progress of a test meal through the gastro-intestinal tract, the presence of an ulcer, adhesions, constrictions, kinks and obstructions may be demonstrated, and by considering such data collectively the location, size and nature of many neoplasms may be determined.

But it is our purpose to consider but one of the features determined by radioscopy, viz: the position of the abdominal organs in connection with auto-intoxication. As far back as 1853 Virchow wrote his classic "The Importance of Peritoneal Fixation as Affecting the onward Progress of Feces." Many writers, including Curschman, Flemier and Glenard, have contributed valuable observations; but since it has become possible to determine the position, outline and movements of the various divisions of the prima via by means of a test meal containing a substance opaque to the X-rays, as salts of bismuth or chromium, recent writers, as Hartz, Goldwarth and Pfahler, have contributed much more and still the field is open.

As causative factors of viceroptosis we may consider heredity, posture, diet, occupation, clothing, pregnancy and wasting diseases as factors of varying importance.

The erect posture removes from the contents of the upper part of the abdomen the immediate support of the abdominal wall which is present in the lower animals, so that in extreme cases the ptosis is only limited by the pelvic floor. Again, the poise or manner of carrying one's body may add its quota, as many of these patients habitually assume a slouching attitude with the chest sunken down and the spine curved so that the ribs press down on the stomach and liver, the diaphragm is lowered and the abdominal walls relaxed.

Note the prominent scapulae, flat chest, sloping ribs and fullness of the lower abdomen.

In the matter of food, many patients are observed who long persisted in an irregular diet, depriving their organs of proper nour-

ishment at times, and at irregular intervals ingesting unreasonable quantities. Naturally the sedentary occupations, which encourage a stooping figure and lessen the vitality of the tissues, as well as clothing which constricts the upper part of the abdomen, also contribute their share. That the hereditary forms of ptosis are latent during the first year of life is self explanatory.

The influence of relaxed abdominal walls, whether from pregnancy or attitude, is readily understood if we recall that the bulk of the stomach, which is but lightly supported by the gastro-phrenic ligament and lesser omentum, rests on a sloping shelf formed by the left kidney, spleen, pancreas and trans-mesocolon. Occupying a somewhat similar position is the transverse colon which is freely suspended by the mesocolon, while the ascending and descending portions are more firmly fixed retro-peritoneally in the normal subject, though Professor Dwight states that nearly 20% of the cases he studied had developed a mesentery for these portions of the large bowel.

The clinical picture of a typical case of advanced ptosis is that of a poorly nourished subject with drooping shoulders, prominent scapulae, flat chest and prominence of the lower abdomen. The greater curvature of the spine is in the upper dorsal region and the ribs form an acute angle, while the complexion is muddy and mentality is apt to be clouded.

To account for the pathology it is necessary to recall a few points of the anatomy. When the diaphragm is habitually lowered and the abdominal muscles relaxed, the main supports of the stomach are removed and it sags, especially at its greater curvature, dragging down on the more firmly attached pylorus and forming a more acute angle with the duodenum and lessening the lumen of the gut. This not only makes it more difficult for the stomach to empty itself but interferes with its circulation causing decreased secretion, fermentation and dilatation.

The tension of the duodenum not only narrows its lumen, but the displaced stomach brings direct tension on its third portion where it crosses the spine; at this point the large superior mesenteric artery and inferior vena cava cross the duodenum at right angles behind the duodenum and behind the pancreas while the vessels of the celiac axis lie over the pancreas and behind the stomach. This relation to the blood vessels and spine is considered by a number of writers as an important factor in constricting the duodenum and disturbing the circulation of the intestinal tract.

As this constriction is in the third part of the duodenum the bile is impounded between the pylorus and the constriction, which may account for its frequent appearance in the vomitus and the fact that these paroxysms were formerly spoken of as "bilious attacks."

The transverse colon participates in the ptosis, and as the splenic flexure is usually more firmly attached, an acute angle is formed which further impedes the progress of feces mechanically, and a stretching of the mesentery in any part of the tract would naturally interfere with the circulation by constricting the vessels thus leading to loss of function and paving the way for atony, intestinal indigestion, colicky pains, kinks and adhesions.

In like manner the head of the pancreas, being in intimate relation to the third portion of the duodenum, suffers from pressure and impaired blood supply, and as Goldwarth has suggested, this may be the most serious result of ptosis on account of the association of joint diseases with an atrophic or sclerotic pancreas as noted at autopsies.

The portal vein also crosses under the pancreas at about the middle of its length, while the celiac axis and splenic nerve are found just posterior to the stomach in this region, so that the organs are so closely related that a displacement of one must necessarily have a detrimental effect on each of the others not only mechanically but by interfering with the circulation and innervation. And again, the same etiological factors which result in displacement of the stomach are necessarily operative on all the other viscera in its vicinity.

The harmful effect on the liver of the tight belts worn by laborers has long been recognized, as well as floating kidneys of women who were addicted to tight lacing; but only recently have we recognized that these and many other conditions were but one link in the chain forming a vicious cir-

cle in which gastroptosis is the most important part.

One of the immediate effects of gastro-enteroptosis is constipation, which has long been recognized as an important factor in the large per cent of all the ills that affect the human race.

The delayed progress of fecal matter through the intestinal tract plays a most important part in the development of the concomitant conditions so frequently noted, viz: organic changes in the walls of the intestines, bacterial fermentation, catarrhal or membranous enteritis, diarrhea alternating with dyschesia, neuralgic pains and colic, simulating biliary or renal colic, intercostal neuralgia or spinal crises. In women especially, a complete picture of neurasthenia frequently develops, so that between attacks of greater severity the patient constantly suffers from flatulence, oppression in the epigastrium, anorexia, malaise, mental depression, hysteria, and loss of weight. In some of these cases a lacerated perineum may have been the prime factor in precipitating the enteroptosis.

We attribute the auto-intoxication noted in these cases to increase in numbers and virulence of the bacteria, and development of toxins, and the fact that the effete products are much longer in contact with the intestinal mucosa.

The inspissation of the feces during one phase of the process and the violent expulsion of copious watery stools at other times are considered as an effort of nature to protect the organism against the absorption of toxins, and as the altered mucosa becomes less absorptive this effort is partially successful to a varying extent, though it frequently follows that nutrition is also much impaired.

The majority of these cases, however, suffer from a number of the symptoms of auto-intoxication. Periodic headaches, vertigo, visual disturbances, insomnia and clammy skin are most common, while marked anemias, disordered mental processes, spasms, delirium and intense prostration are not rare, and at present there is a strong tendency to attribute many other systemic manifestations of toxemia solely to the bowel; among these are arterio-sclerosis, arthritis, iritis and neuritis.

The widespread interest of the profession in the study of these cases is a great encouragement to continue investigation, and the constant co-operation of the medical adviser with the roentgenologist and pathologist is increasing our understanding of conditions formerly considered hopelessly complex. The results of treatment based on the data thus acquired with a view to removing the cause, properly supporting the ptosed organs and strengthening the parts by special exercises, massage, electricity, etc., have been remarkably successful but are beyond the province of the paper.

The following case histories and radiographs are cited by way of illustration:

CASE I.

Miss S., age 28, musician, weight 150. Had best of health until 22 years old. Then began losing weight, going down to 115 pounds. Was exhausted all the time, nervous, had a hacking cough, headache and sallow complexion. Had pleuro-pneumonia 4 years ago. Since that time she, as well as her physicians thought that she had tuberculosis, for which she was being treated at the time she presented herself for diagnosis. Appetite has been poor the past year and a sense of fullness follows the ingestion of small quantities of food.

This patient was addicted to tight lacing and had danced excessively since the age of 13.

A radiographic examination of chest found tuberculosis to be absent. By the bismuth test plate "A" case I indicates the degree of ptosis

Case 1—Plate A.

of the stomach and first portion of the colon. Note the inability of the stomach to empty itself nine and one-half hours after ingestion of food.

Case 1—Plate B.

Plate "B" shows the extreme ptosis of the entire colon.

CASE II

Mrs. V., age 41, weight 105 pounds. Has two children, younger one 17 years old. Was referred for radiograph because of having all symptoms of renal calculus. The first signs appeared in February, 1908, with stinging pains in right kidney, radiating forward. In December of same year and April, 1909, patient experiereed such violent attacks of renal colic that they left her severely prostrated. Had much headache, vomited frequently and was somewhat constipated. First renal hemorrhage appeared in October, 1911. The stone was, in October, located in the right kidney near the pelvis by a radiograph and was removed successfully in November, 1911.

The skiagraph of this case which was made in the standing position shows the stone on a level with the lower border of third lumbar vertebra In the recumbent position this foreign body, with the kidney, was found to retract two inches.

By the bismuth meal the lower end of the stomach was found two inches below the umbilicus and the colon well down in the pelvis. This plate was made 51 hours after the ingestion of the bismuth.

This case illustrates the point that where the etiological factor is potent enough to displace several of the viscera, all the organs of the abdominal cavity are more or less displaced.

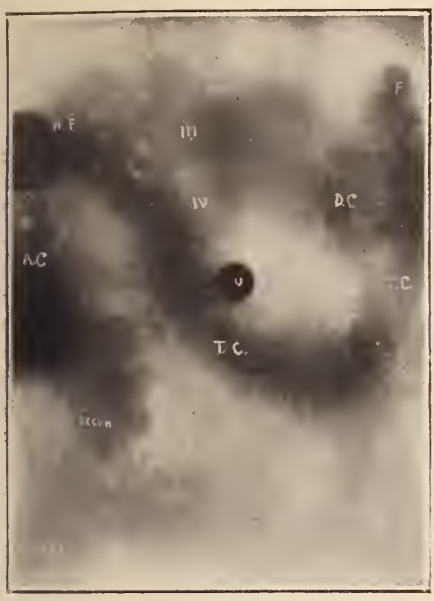
Case 2—Plate C.

Plate E—X, the cecum; H, hepatic flexure; T, transverse colon; L, loop in colon; S, splenic flexure.

CASE III.

Mr. X, age 30, occupation, office work. Early history negative. Is well nourished and has good digestion. For the past five or six years has had attacks of biliousness and constipation recurring every six or seven days. The tongue is coated almost continually, "liver spots" appear on the face and stupidity accompanies these attacks. The evacuations are never inspissated—always of normal consistency.

A torpid liver is unquestionable in this case. This colon, the "Dragon" type, as illustrated in plate "D" shows the ptosed transverse colon,



Case 3—Plate D.

the loop and the acute angle in its course at the splenic flexure which greatly retard the onward movement of its contents. Radiograph made twenty-three hours after ingestion of bismuth.

PAROXYSMAL PULMONARY OEDEMA.

J. T. Thornton, M.D., Wheeling, W. Va.

(Read before Ohio County Medical Society.)

I desire to bring to your attention this evening a clinical entity that I regard as of the utmost importance, although it has received but scant recognition at the hands of writers on internal medicine. The condition has been named "Paroxysmal Pulmonary Oedema." Its importance is due to the fact that the victim of the attack is placed in imminent danger of death, and life may be saved by the prompt recognition of the condition and the institution of proper remedial measures.

In January, 1907, Riesman published a paper entitled "Acute Pulmonary Oedema, With Special Reference to a Recurrent Form." In this excellent paper he defines and describes the condition, gives a complete history and bibliography, discusses the etiology, symptomatology, pathology, and treatment, and adds to the literature six personal cases. Stengel in January, 1911, published an article on the same subject. He names the condition "Paroxysmal Pulmonary Oedema," cites five personal cases, and gives valuable hints on treatment. Stengel's general discussion of the subject contributes little additional to what Riesman had already written.

I wish to report four cases of paroxysmal pulmonary oedema that have occurred in my practice within the past two years.

Case 1. Mrs. B., aged 60 years, white, married, had come to Wheeling to visit her daughter. I was called at 6 a. m. on April 14, 1910, and found her suffering from a comparatively mild attack of acute pulmonary oedema. She was in bed, propped up by pillows, breathing heavily, and expectorating a frothy, white sputum. Her pulse was rapid, but of good quality. The lungs were full of mucous, bubbling rales. The heart sounds were clear and the action regular. The breathing was evidently becoming less labored, and her general condition seemed good. She recovered from the attack without any special treatment.

She gave a history of having had numerous similar attacks extending over a period of two or three years. It seemed that the attacks were usually preceded by some gastro-intestinal disturbance. Prior to the onset of these attacks her health had been good. Later I took her blood pressure and found it high, 170 mm. The urine was negative for albumen and casts.

Ten days later I was called again early in the morning, and found the patient with a similar, though more severe, attack. The hypodermic administration of morphia sulphate gr. ¼, atropin sulphate gr. 1/150, and the application of six dry cups over the chest posteriorly, gave relief in a short time.

Two weeks after this attack I received another urgent call at 5 a. m., and arrived at the house twenty minutes later. The patient was gasping for breath, unconscious, lips and tongue purple, face a purplish-red color and blood-tinged, frothy fluid running from the mouth. She was evidently at the point of death. Without sterilizing my instruments, I rapidly did a venesection at the elbow, but the patient died during the operation.

Case 2. Mrs. M., aged 63 years, white,

married, housewife, had always been an active, hard-working woman, and had enjoyed good health. I saw her for the first time on November 14, 1911, during an attack of acute pulmonary oedema. Apparently she had been perfectly well up to the time of the attack, which began suddenly at 7:30 p. m. When I saw her an hour later, she was sitting in a chair, leaning forward, and suffering from the most intense oppression of breathing. The forehead was covered with a cold, clammy sweat. The face wore an anxious expression as if fearful of impending dissolution. The mucous membranes were slightly cyanotic, and the extremities cold. The pulse rate was 136. She was conscious, and sighed and moaned continually. She expectorated a frothy, slightly blood-tinged fluid. Over both lungs, both anteriorly and posteriorly, were heard moist rales. No cardiac murmur was present.

I immediately gave a hypodermic injection of morphia sulphate gr. 1/6, atropin sulphate gr. 1/200; mustard paste was applied to the chest anteriorly and posteriorly, and heat to the lower extremities. Within twenty minutes there was a perceptible improvement. The dyspnoea became gradually less, and in an hour the patient was comfortable. The next morning she had some slight dyspnoea, the lungs at both bases posteriorly contained fine, crepitant rales, pulse 112 and intermittent, temperature 101° F., no expectoration.

The subsequent history of the case is of interest. The patient never regained her health, and had repeated attacks of acute oedema of the lungs. Five of these were as severe as the first attack; others were milder. The last attack occurred on the 27th of March, 1911, during which she died. I was out of town at the time, and possibly the failure to secure prompt medical attention was responsible for the fatal ending.

In the intervals between the attacks the patient suffered from general nervous irritability, insomnia, oedema of lower extremities, albuminuria, intermittent and irregular pulse of increased tension. These symptoms I regarded as an expression of myocardial insufficiency. At no time was I able to detect a heart murmur.

Case 3. Mrs. Z., aged 56 years, white, married, housewife, was seen by me for the first time on the 26th of December, 1911. Her previous history was unimportant, with the exception of frequent attacks of tachycardia extending over a period of about twenty years. I was called in great haste and was able to respond promptly. I found the patient sitting in a chair, totally unconscious. The respirations were exceedingly labored, the mucous membranes dark purple in color, the pulse rapid, very weak, and most irregular. The head and extremities were cold and covered with sweat. At the apex of the heart could be heard a soft, blowing murmur. The lungs anteriorly and posteriorly were filled with moist, bubbling rales. From the mouth exuded a frothy, bloody fluid. The condition of the patient seemed critical and was most alarming. In fact I feared that death would soon occur. The treatment consisted in the administration of morphia sulphate gr. ¼ and atropin sulphate gr. 1/150 hypodermatically, the application of six dry cups over the lungs posteriorly, mustard paste to the chest, front and back, and heat to the extremities. After one hour consciousness returned, the color was restored to normal, the breathing became easier, and the patient seemed out of immediate danger. She was confined to bed for five days, but made a complete recovery, and within a month was apparently in good health. The attack of pulmonary oedema was not repeated, but six months after the attack she died from cerebral hemorrhage.

Case 4. Wm. B., age -- years, negro, married, butler by occupation. In 1882 he had typhoid fever, and in 1903 acute articular rheumatism involving right ankle. One year ago he had shortness of breath, and consulted a physician who told him that he had "heart trouble." For the past year he has been under treatment. Six months ago he was very anemic, but has recovered completely.

On September 20, 1911, at 6 a. m. he awoke with slight dyspnoea which gradually increased in severity. At 8:30 a. m. the dyspnoea became alarming. I saw him at 8:45 a. m., and found him sitting in a chair, leaning forward, and breathing heavily, inspiration and expiration being of about equal duration. From time to time

he would expectorate a white, frothy, slightly blood-stained fluid. His face was covered with sweat, and his expression anxious. There was no loss of consciousness. Over the entire precordia could be heard a loud, blowing, systolic murmur. The apex beat was displaced one inch to the left of the nipple line. Both lungs were filled with moist, bubbling rales.

I immediately instituted the same treatment outlined in the history of the preceding case, with most gratifying result. In a short time the dyspnoea was relieved, and the patient comfortable. He made a good recovery, and at the present time (two months later) his health is as good as before the attack.

To summarize briefly the symptoms, we find—

1. Onset: Sudden onset with patient apparently in good health.

2. Respiratory: Rapid and labored breathing; cough usually present, sometimes absent; abundant, frothy sputum, often blood-tinged.

3. Circulatory: Pulse feeble and rapid, or full and bounding.

4. Nervous: Sense of extreme suffocation and of impending dissolution; in some cases stupor or unconsciousness.

5. General: Face livid or pale; lips usually moderately cyanotic; hands, feet, and whole body cold and covered with sweat.

6. Physical signs: Loud, bubbling, mucous rales over entire chest; general impairment of resonance.

The first attack may prove fatal, but recovery with repetition of the attack is the rule.

It is necessary to distinguish paroxysmal pulmonary oedema from certain other conditions.

1. In bronchial asthma the sputum is tough and scant; the rales are dry and piping.

2. In pulmonary embolism there is presence of diseases which would lead to embolism; expectoration is developed late and consists of dark blood.

3. In acute cardiac dilatation the dyspnoea is not so intense and is less mechanical; there is history of preceding cardiac weakness, and of gradually increasing dilatation of the heart. As Riesman says, referring to paroxysmal oedema:

"The dominant feature is the inundation of the lung with fluid." On the other hand, in acute cardiac dilatation the amount of fluid in the lungs is not great, and its presence forms a secondary subordinate part of the general picture.

4. In uremic asthma the dyspnoea is not so severe; there is no profuse frothy expectoration, and there is absence of the characterstic signs of oedema of the lungs.

Treatment during the attack—Riesman says: "The best results are obtained by venesection." He also recommends dry cups to the chest, a small dose of morphine hypodermically if there is much nervous excitement, and diffusible stimulants (whiskey, aromatic spirits of ammonia, and camphor hypodermically) when the pulse is feeble.

My own experience would indicate that by the hypodermic administration of morphin and atropin such prompt and favorable results are obtained that as a rule venesection is unnecessary. However, it is certainly a measure to be employed when the attack does not yield to morphin, and there are signs of overflowing of the venous circulation.

Stengel states that in his series of cases there never was any difficulty in controlling the attacks with morphin alone or supplemented with other less important drugs. He further states that morphin without atropin was found on repeated occasions to be as efficient as with the addition, and that when atropin without morphin was used the effect was not striking.

POSTURE IN LABOR.

(Report of Two Cases.)

Thos. R. Evans, M.D., Huntington, W.Va.

In a paper in the April number of this JOURNAL I made a plea for natural, instinctive positions during labor; for by simple posture the *forceps can perhaps be dispensed* with ninety-nine times out of the hundred, much *pain saved, and hours saved.*

Is it not partly due to the positions

usually rigidly taught by the obstericians that obstetrics is considered a rather wearisome science, despised by many, utterly rejected by some, and from necessity pursued by so many? Life is so short, and there is the vision of the indefinite primipara. So much sleep is lost, for the large majority of women give birth before day, and there are other most undesirable accompaniments. If then, by a return to ancient practice, such practice be found to be as safe as it is expeditious, certainly great good may be thus secured. There are superstitions, or false teachings on the part of culture, as there are through ignorance, and it is so that to "confine a woman" in any other position than on her back or side, is against most modern teaching, except under certain circumstances.

In surgery we have been most thankful for the Trendelenburg and similar expedients, yet when we come to obstetrics, the most physical and mechanical of the branches of medicine, strangely there is too much halting. Since writing last month I have had the pleasure of reading Edgar's very handsome work on Obstetrics. He writes to the effect that in unduly protracted cases the woman may be allowed to sit on the edge of the bed, or on a chair. He quotes Ring, who rightly devotes more space to posture, as to the advantages of the squatting posture. I have also since read Davis on Operative Obstetrics. He writes that "in the knee-chest posture, with the fetus impacted in the pelvic brim, the tendency will be for the fetus to gravitate upwards and thus to assume, in the absence of uterine contraction, a more favorable position. Version may be performed in the knee-chest posture, using the force of gravity to dislodge the child." Excellent teaching. Davis gives a picture of the knee-chest posture.

Of squatting and sitting postures: "In the squatting and sitting postures the two halves of the pelvis are rotated outwards, the fetus brought into the axis of the birth canal, and its descent aided by the force of gravity." Before mentioning these simple expedients he dilates on the Walcher position.

As is known, this is used in contraction at the brim when the head does not seem to enter or does not enter.

There are difficulties in performing the Walcher position, and it is probable that the more easy position advocated in this paper will accomplish the same purposes. He also mentions the English posture, the woman on her left side, with the hips at the edge of the bed or table as favorable for the passage of the child through the pelvic brim, and for its exit over the pelvic floor, "and as there is no pressure upon the perineum the pelvic floor is free to dilate. Of course the right, or "German side," would be equally as helpful.

This reminds that an author upon such an important subject cannot be too particular in statements. As he does not mention the right side, it might naturally be inferred by the novice that it would be wrong to tell the woman to lie upon it.

I was lately called to a case of labor. The woman was the mother of one child. Her husband came for me, leaving his wife alone on a mountain. Upon my arrival I found her kneeling in the bed, in labor and in prayer. I made the examination, and told her to continue on her knees. I had been with her about an hour when she suddenly turned to the dorsal position and the child was born.

I was lately called to a case between 12 and 1 a. m. Of course the night was dark, for women are not usually confined during the full moon, but most likely during a crescent aspect of the moon. And as the crescent is an important emblem to the Mahomedan, so it is important as a guide to the time of labor. There is nothing new under the sun, and doubtless this observation was made thousands of years ago, but I do not find it in my readings, and I have read medicine since 1873.

At and a few days after the crescent of the new moon can be seen, look for the majority of labor cases to occur, or during the *last quarter* of the moon is a prolific time for labor cases. The time during which the moon is "gibbous," when it is less than half and more than a quarter circle, is not so frequent a period for labor to occur. At the time of the *full moon labor very rarely occurs.* (I am not writing of consequences from the moon, but of

coincidences.) The consolation in this is that the tired doctor knows when he will not be called from his bed to a case of labor, rather should know. It happens that he was exempt on two nights of last May, for there were two full moons. A dark night for labor cases, or darkish night. While I do not exactly hold with Paracelsus that astronomy is one of the four pillars on which medicine rests, there are certain coincidences in the phases of the moon with the physiology of the woman. There is a coincidence in time, or in cycles, and doubtless in other particulars.

Medicine embraces the study of all sciences, and we must not consider astronomy as antiquated, but must somewhat intimately associate it with obstetrics. By doing so we engage in the most sublime and relaxing of studies, provided we do not go too deep. Personally, I have been much assisted by the association, and astronomy more than any other study leads with most certainty up to a Great Jehovah, the capstone of education.

Suppose you are a gynecologist and wish to examine a woman. First look at the calendar or almanac, and if you go and find her menstruating on the day of the full moon you will find what is exceedingly rare.

To return from the moon. My second late case was in a seven-times para, and an epileptic. She had been in some pain for 11 hours before may arrival. I soon found the os expanded to the size of a silver dollar, and a head presentation. I gave 20 grains of the sulphate of quinine in capsules, and mildly suggested to the patient that she get upon her knees in bed. She did not do so, and I did not insist. I waited for four hours; in the meantime she thought I helped her when I would press the uterus downwards during a pain, and at the same time press on and irritate the perineum. She had strong and frequent pains, perhaps from the quinine. The feast had long since been prepared. I had studied the anatomy of the chicken before it had been put into the pot. It was very fat, and a bystander remarked that it had "much tallow." The coffee had boiled and boiled, but I was the uncrowned hero. I had chloroform, but no forceps. The husband and a woman attendant feared that the patient would have "one of her spells." The patient was persuaded to kneel, and in fifteen minutes by my watch the head popped out! By not *commanding* the woman to get upon her knees soon after my arrival, I had uselessly wasted several hours. And there were two contingencies, either one of which might have demanded a more speedy labor—she might have had an epileptic convulsion, or the sedative effect of quinine might come into play.

The life of the man who attends labor cases is like that of a fireman. His bell is as the fire bell in the night. He is an emergency man and usually cannot leave the point to which he is called until the cause of the call ceases. He is a subject of more false alarms than is the fireman. Especially if he is called before nine or ten o'clock in the evening is the call apt to be false, or premature. By loss of sleep his life may be shortened.

Since these things are true, any methods of more speedy delivery should be welcomed, however ancient.

Much space is devoted in books describing the mechanism of labor, but the soft mechanism of the modern bed is rather countervailing while the woman lies on her back in labor; and under such a condition a position on the side is not much more favorable for a speedy labor. It is seldom that a lower animal is found on its back after death, but it is almost the invariable situation of the dead human or of a person greatly weakened from any cause. Therefore we should not expect the best results from a woman while in labor on her back.

ANONYMOUS VS. PERSONAL JOURNALISM.

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(Prepared for the American Medical Editors' Association.)

The thoughtful observer of life and men and manners cannot fail to see that in recent decades our journalism has been poisoned and is becoming more and more poisoned by the dominant evils of our modern age. One of these evils is anonymity. Our life is rapidly becoming an

anonymous life. Keen onlookers, clear thinkers and earnest well-wishers of our country have seen the danger and are doing what they can to avert it.

In the sociological realm we have begun to struggle against the trusts, and the first attack has been aimed rightly enough against their anonymity. The magnitude of corporations is dangerous chiefly because it allows our tyrants to elude us. Unlike the ancient oppressor of the people, the modern tyrant is shy and retiring and hides himself behind a bureaucracy of some sort. We cannot find him to put our hands upon him, to kill him, or to throw him into prison. We all know that the remedy for many of our present social ills would be found if we could put behind prison bars a hundred or two of our evil captains of industry, if we could break through the tangle of technicalities that hedge about the master spirits of the Standard Oil Trust, the Steel Trust, the Beef Trust, the Coal Trust, and all their kind. To little purpose do we fine those anonymous tyrants, the corporations, and try to disintegrate them, so long as the real rascals of men who use them to our detriment cannot be named by name and punished in their individual and mortal bodies.

In the political sphere the same anonymity has prevailed to oppress us. Graft has grown to such proportions in our national, state and city government, and it has spread its infection so far that we have become a byword and a laughing-stock to the world. Latterly we have risen up to cast off from us this humiliation, and, rightly enough, our first efforts have been directed to tearing through the anonymity of "the administration," to find and reach the actual individual malefactors hiding beneath that cloak. The great and fast-growing enthusiasm for a commission form of city government means simply that we wish to be rid of the evil of anonymity in the conduct of our cities; we demand to see and to know by name the men who are responsible for the good or evil in it.

The ramifications of this same evil of anonymity can be followed into countless spheres of modern activity, but what is of especial interest to us in its regard is to note its presence in the field of journalism in America, and its continued growth even in our own particular department of medical journalism. American newspapers stood for better things in the days of Dana and Greely and Reid than they stand for now when Henry Watterson is merely a relict of a great army whose day is gone. The evil of anonymity that has destroyed the former nobility of general journalism has already made inroads into medical journalism and is tending to greater growth. Now is the acceptable time for this Association to take a decided attitude against it.

Anonymity is not in itself an evil thing. As exemplified in our modern life, however, it denotes an evil tendency, and it should be discouraged; and for that reason I hold this brief against anonymity in medical journalism, and before this Association of the Medical Editors of America I plead that it be discredited and that we strive more and more to accentuate the personal note in the periodicals we represent.

Anonymity is not in itself an evil thing. In itself it is indifferent, and takes on the note of good or of evil depending upon the good or evil motive that establishes or maintains it. Not only is it possible to conceive, but, God be thanked for it, on many pages of human history it is possible to see examples of anonymity of the noblest and most inspiring sort. Again and again there have been bands of brave young idealists, fanatics in the pursuit of some good purpose, devotees to some cause they deemed worthy, who were so intent upon the sole aim of establishing the success of their cause that they were willing to sink any thought of glory to themselves, and to die uncrowned, unhonored and unsung, content with the triumph of the cause they loved. Such noble and beautiful self-abnegation is that of the regiment storming an almost impregnable breastworks, each man ready to bleed or die for the glory of the flag, ready to cheer for his regiment with his dying breath, and to greet with glad eyes, though dimmed by death, the spectacle of a comrade planting the standard on the conquered parapet. Something of this knightly spirit first inspired the

idea of the leading article in journalism. Proud of the high ideal of his publication and intent on maintainng it, the member of the old-time editorial force was content to write the leading articles assigned to him, amply rewarded if the high purpose of the journal was glorified, even though he himself were forgotten or overlooked.

If such a splendid fanaticism were everywhere extant and were the only motive behind the anonymity of modern journalism, this paper might not be offered to you. No one of us would decry the philanthropist who gives lavishly to a good cause and does not *care* to reveal his name. But what if a man does not *dare* to reveal his name! This, alas! is a much older, much more common human attitude, and we cannot say that it is a nobler one, for it is sodden with cowardice, the most despicable of the vices of men. The anonymity of the modern press is taking on more and more the character of this cowardly shyness of the man whose motives will not bear close scrutiny, whose article will lose its force if the actual author be known in his proper and naked person, and who uses the reputed good purpose of the journal for which he writes, to hide the unworthy, craven, or selfish purpose which prompts the writing. A man ought always to be ready to say what anonymous article he has written. Even the brave and self-effacing young enthusiast will agree to this, and so will every writer who is conscious of the sincerity and integrity of his motives. The proper rule, then, is for every man who writes to sign his article with his name. If the journal has won for itself any true and deserved honor because of the honest and single-minded purpose that inspired its existence and dominates its policies, that honor will not be lessened by the fact that every writer on its staff is willing and proud to bear the scrutiny of every reader, is ready and anxious to show that in what he has written there is no taint of indirection, nor greedy self-seeking, nor any cowardly evasion of logical consequences. The stream can rise no higher than its source; no journal is better than the men who make it. If they are good men whose lives and character and worth and work can bear the light of day at all times and from any angle, the cause of the paper for which they write will not be hindered but rather advanced by the accentuation of their personalities in the conduct of its policies. If, on the other hand, a writer is borrowing the reputation of the journal in order to delude the readers and to betray the confidence they have learned to place in it, then that writer is simply dishonest, and the journal itself is wicked if it knowingly becomes a party to the fraud.

To sum up my contention, I would say that, although it is conceivable that anonymous medical journalism may be of so high and idealistic a type as to permit of its anonymity, yet in view of the growing mischiefs that follow anonymity in our modern life and of the danger that medical journalism might be caught irretrievably in the current of a tendency that is evil in practice, the plain duty is upon us to make our journals take on the personal note as quickly as possible. If the dangerous tendencies of any age are to be frustrated, the task devolves upon the men of the professions, the men of learning and of thought and of high and noble purpose. One towering vice of our day and country is that too much of our public business is conducted in private. Happily, this dangerous modern tendency towards the doing of every important thing under cover is being recognized, and more and more is it being seen that publicity is one of the readiest remedies at hand for much that we deplore. The medical profession should be at the front of the battle against peril, however insidious it may be, and we should grasp the weapon of a personal type of journalism with which to strike a telling blow for the advent of better things. Every leading article, every scientific paper, every letter from a correspondent, and every book review should be signed by name or initials so that the identity of the writer may be easily determined.

Those who urge the advantages of anonymous medical journalism are either men who do not realize the special danger of our time, or they are men who are taking advantage of it for their own profit

A CASE OF LYMPHATIC LEUKAEMIA.

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The following case may be of interest, being a rather rare condition:

White, female, multipara, age 50, admitted to Sheltering Arms Hospital, February 19th, 1912, complained of pain in epigastrium and general muscular weakness which had been growing gradually worse for the last five or six months. Her history was negative except she states that a few months previously she had been operated upon for cervical adenitis.

Examination—Marked pallor, moderate emaciation, muscles flabby, hearing deficient, general adenitis (glands occurring in groups movable under skin, not tender), liver apparently not enlarged, edge of spleen palpable, two and one-half inches below costal margin, apparently not enlarged upward, urine negative.

Blood Examination—Hemoglobin 10%, red cells 1,480,000, white cells 90,000, of which 95% were lymphocytes and 75% of these were large lymphocytes. There were a few nucleated red cells.

Diagnosis—Lymphatic Leukaemia.

This patient died on February 22nd before any treatment was instituted.

Selections

DYSPEPSIA IN INFANTS (STADIUM DYSPEPTICUM)

Julius H. Hess, M.D., Chicago

In practice, especially in young infants, frequently we do not see the stage of disturbed metabolic balance, but see dyspepsia directly, due to an excess of sugar in the food. This can be likened to an excess in whey components when milk is the food used. Fats, unless in excess, probably only play a secondary role due to the presence of sugar fermentation. This is characterized clinically by acute gastro-intestinal symptoms, the most marked of which are the stools, which are increased in number and of an abnormal quality. The organism does not shown signs of any deep-seated general changes; weight loss is moderate or remains constant, temperature is moderately increased and repair is rapid with the withdrawal of the improper food.

The diagnosis can only be made by a careful consideration of the history, the clinical and functional symptoms, and only that picture of gastro-intestinal findings which developed primarily in a healthy infant or follows directly the stage of disturbed metabolic balance can be diagnosed as dyspepsia and treated as such; otherwise cases of intoxication and decomposition may be neglected.

ETIOLOGY.

1. Congenital lowered tolerance to cow's milk.
2. Errors in diet with milk of good quality. (a) Overfeeding with diet of normal proportions (too frequent and too much). (b) Feeding with a diet of improper proportions (excess of sugar, etc.).
3. Feeding with infected milk.
4. Infection of the gastro-intestinal tract (external infections).
5. Systemic infections (otitis, pharyngitis, etc.) associated constantly with a lessened tolerance for food.

SYMPTOMS

Symptoms in General.—Severe symptoms are absent. The mind is clear. The heart action is not rapid. Respirations are not greatly increased. The skin remains unaltered.

Weight.—If there is an excessive sugar feeding in the treatment of a preceding disturbed metabolic balance, we at first get an increase in weight. This ceases later, and dyspepsia develops with moderate weight loss.

The temperature is irregular and moderately increased, and, when it follows diets rich in sugar and salts, is of the alimentary type.

Gastro-Intestinal Symptoms.—The appetite is poor. The mucous membrane of the mouth is red and may be the seat of thrush (due to decreased immunity). Vomiting may be present and usually occurs long after feeding. The stomach may contain food seven to eight hours after feeding, which contains volatile fatty acids (odor), but no free HCl. The abdomen is distended and peristalsis increased (auscultation),

Restlessness is marked, probably due to abdominal findings.

Stools.—The clinical diagnosis is usually made from the stools. They are increased in number and watery, and the reaction is usually acid. The color is green, mucus is present, and curds composed of fatty acids, not casein, are present. The number is more important than the quality, as microscopic examination gives us little etiologic or thereapeutical enlightment, and we cannot get a very definite idea of the quantitative chemical contents.

Bacteria specific for dyspepsia are unknown.

Urine.—Sugar, albumin and casts are absent, unless there is a tendency toward intoxication.

METABOLISM

Changes in part are due to (1) peristalsis; (2) to increased intestinal secretion, which latter accounts for the moderate increase in the protein matter in the stools, and not, as formerly thought, to decreased digestion of the food proteins (casein, etc.). The remainder of the curds is due to fatty-acid salts and bacteria. Fat absorption is usually only slightly reduced. Fat diarrhea is not frequent and only seen in fat-rich foods.

Soaps and neutral fats are in about normal relation to the total fat content. Volatile fatty acids formed from carbohyrates and fats by bacterial action are increased. Sugar is absent. Starch varies directly with the peristalsis. Salts in stools are increased. Green color is usually due to oxidation of bile constituents.

In general, protein retention need not suffer. Ash balance may remain normal. The water in the stools is increased, and in the urine is decreased.

PATHOGENESIS

Sugar and salts, which in the normal child cause no symptoms, in the impaired organism, or in excess, can cause dyspepsia, as evidenced by diarrhea and fever.

Pyrogenic Action of Food Constituents. Action of Salts.—Sodium is the most important salt in raising temperature. Meyer gave a normal child 100 c.c. 10 per cent. NaCl solution per mouth, with usually no result, but in infants with gastro-intestinal symptoms the temperature was raised. Potassium is less important in raising temperature. Calcium rather tends to lower temperature. The mode of action is unknown.

Sugar.—Milk-sugar is more active than malt-sugar in raising temperature, but sugars are less constant experimentally than salts. Whether due to sugar itself or products of fermentation is also unknown. *Proteins* cause no rise in temperature and tend to improve stools. *Fats* have an uncertain and probably indirect action. (They seem to add to the bad effect in the presence of sugar and salt disturbances which, however, cease when the latter are withdrawn.)

The dyspeptic picture is due to (1) slight intestinal epithelial injury following various causes; (2) the administration of certain foods: (a) whey and sugar, which are the most important, and (b) fats, of less importance. These must be administered in quantities large enough to affect the injured epithelium and further impair its function, but not sufficient to cause intoxication.

PROGNOSIS

This is good with proper diet. It is bad with improper diet, with tendency to intoxication and decomposition, varying indirectly with the age of the infant and directly with the previous number of attacks and tendency to recurrence.

TREATMENT

Human Milk.—The younger the infant, the more important.

Artificial Food.—Remember that primarily the sugar and whey content of the food, and secondarily, the fats are the irritants.

1. In mild cases reduce the milk to a minimum, and especially the sugar content.

2. In the severer cases reduce the sugar, whey and fats. It is best temporarily to withdraw food entirely as follows:

(1) Starvation (or hunger) for one day (tea and saccharin).

(2) Indifferent diet for second day (low in food value and salts); i. e., Young, one-third milk (best boiled) plus two-thirds thin oatmeal gruel, without sugar. In severe cases, one-third skim milk plus two-thirds thin oatmeal gruel without sugar. Buttermilk may be used in place of milk. The quantity on the second day should not ex-

ceed 6 to 8 ounces, as follows: five feedings of 1 to 1½ ounces of food, and 20 to 25 ounces of tea, plus saccharin, given *ad libitum*, giving a total of about one quart of fluids. This will usually answer. Further treatment depends on the reaction to the above: if the general appearance improves, also the dispostion, etc., and the weight loss ceases in two or three days (which is the case even in under-feeding), then the treatment was correct, otherwise decomposition must be thought of.

(3) When the weight-curve is constant, the quantity should be increased, but the quality left unchanged; 5x2 ounces, etc., of the same mixture, plus water or tea to the necessary quantity between the feedings. Weight increase should not be expected because of the low sugar content, but a decrease in weight should always be considered serious.

The stools are, at first, small and contain mucus; later less frequent, and often on milk mixtures without sugar there are fat soap stools which are a good indication.

3. If the temperature and stools are normal after three to five days, carbohydrates can again be added, best in the form of malt preparations (avoid milk-sugar because of its rapid fermentation), beginning with 1 per cent., and gradually increasing to 5 per cent. At first, there is a rapid increase in weight; later a slower one.

Avoid under-feeding too long, even if the stools look bad, if the temperature and weight curves improve, because of the danger of decomposition. Fats can be added in place of sugars, but this should be done with care. (Experiments with cod liver oil have given me the best results.)

ALBUMIN MILK

The albumin milk of Finkelstein is distinctly indicated in these cases. 1. Directions for making are as follows: To 1 quart of raw milk add 1 tablespoonful of essence of pepsin (elixir rennet, junket tablets, dessertspoonful of pegnin or chymogen) and stir for one-half minute. The mixture of milk and ferment is now kept at 100 to 107 F. and perfectly quiet for about fifteen minutes, when the clot is formed. The free whey is now poured off and the remaining curd is put into a thin muslin bag, or one made of four layers of gauze (if too thick it drips too slowly or vice versa, curds will pass through and some of the curd is lost), and left to drip for one hour. The curd is now placed in a fine hair sieve and rubbed through with a potato masher, adding buttermilk, one pint, to facilitate this process. The passing through the sieve should be repeated until the curd is minutely divided.

Now, as a final process, water to make a total mixture of 1 quart and 1 per cent. of malt-sugar are added.

This is now put into a receptacle resembling a small ice-cream freezer and put on the stove to boil for ten minutes. While boiling, the handle is vigorously turned, stirring the milk inside thoroughly and constantly (stirring with an egg-beater if the above is not obtainable will answer; the former is to be recommended as it also prevents evaporation. I find that stirring with a spoon does not cause agitation enough to prevent large curd formation.)

Churning is continuously kept up for two reasons: 1. To make the curd finer. 2. To get the suspension more homogeneous. After ten minutes of boiling, the kettle is placed in a bath of cold water to cool it off, still turning the crank for a few minutes until the milk is cool. Then it is put into bottles. Overheating for feeding ruins the product: 100 F. does not change it.

* * * * *

Albumin milk prevents abnormal fermentation in the intestinal tract on account of (1) the low content of easily fermentable milk sugar; (2) the low content of whey salts (the latter favor fermentation), and (3) the comparatively high protein content (the latter counteracts fermentation). On standing, a precipitate is likely to form in the bottle containing the albumin milk. Before feeding, the bottle should be well shaken. The quantity to be fed should be warmed to the body temperature and again shaken. Overheating is objectionable. The milk should be kept in a cool place. If thus taken care of, it preserves its quality well, for at least five weeks.

Albumin milk contains 3 per cent. protein, 2.5 per cent. fat, from 1 to 1.5 per cent. of milk sugar, 0.5 per cent. of mineral salts. The mixture contains 450 carlories to each liter (Finkelstein). My own tests show the fat content somewhat lower, averaging about 2.2 per cent.

Directions for Use.—Albumin milk is indicated in all infantile disorders which are associated with diarrheas, especially in those cases in which breast milk is not obtainable. It is also valuable in cases of dyspepsia, entero-catarrh, cholera infantum (intoxication, Finkelstein), acute atrophy (decomposition, Finkelstein).

In cases even where the bowel movements continue thin and frequent, or contain mucus, one should proceed to make a daily increase in the quantity of albumin-milk, and after a lapse of eight days begin to add more sugar, or even sooner if the stools warrant it, gradually increasing the dextrin-maltose to a total of 5 per cent. If the weight still remains at a standstill, 2 per cent. of flour may be added. It some times happens during the period of convalescence, after improvement has once set in, that an apparently unfavorable condition occurs, characterized by frequent and thin stools. In these cases it may be said with great emphasis that one should not diminish the quantity of the albumin-milk or the sugar, but should continue with the same dosage and quietly wait. After a short time, if this suggestion is followed, improvement usually sets in; however, when a profuse diarrhea is associated with a marked drop in weight, the sugar must be reduced.

In some of these cases the disturbance is not primarily a digestive one, but it seems to be associated with an infection in some other part of the body. Thus, for example, an intercurrent rhinitis, or bronchitis, will almost invariably cause a standstill or loss in weight, with more or less pronounced digestive disturbance.

Management in Detail.—In cases of dyspepsia, feed the baby tea sweetened with saccharin for six hours. Begin by feeding 300 gm. (10 ounces) of albumin milk, divided into five or six feedings. Tea and saccharin may be given between feedings, as seems indicated. This can be gradually increased by adding 50 to 100 gm. daily until 180 to 200 gm. per kilogram of body weight are given. Carbohydrates should be added, as previously stated. Children will usually require from four to eight weeks of treatment with albumin-milk. After this the appropriate milk mixtures should be tried. The change to other mixtures must be made completely and quickly, all bottles being stopped at one time. Relapses are an indication for a return to albumin-milk.

Other Treatment.—1. Avoid laxatives (castor oil, calomel, etc) except for an initial dose. 2. Avoid gastric lavage, at least in early cases. 3 Warm compresses to abodmen aid in removing flatulence, etc. 4 Astringents (tannalbin, tannigen, bismuth subnitrate) are indicated after the weight-curve is steady, temperature normal and the child generally improved, but the stools still frequent.—*American Journal of Diseases of Children.*

FEVER OF THE NEW-BORN

Eugene Boise, M.D., Grand Rapids, Mich.

Mrs. W. went to the maternity cottage of Butterworth Hospital at about 8:30 a. m., July 3, 1911. She was apparently in perfect health. Her temperature on arrival was 98.8°. The kidneys were acting normally and examination of the urine showed it to be free from albumen. She was delivered at about 4 p. m. of the same day of a baby well formed and apparently perfectly normal in every respect. The labor, while severe, was normal, without forceps. Two hours after delivery the mother's temperature was 100.6° and the baby's 100.4°. From this time the mother's temperature gradually fell, so that twelve hours after delivery it was 98.4°. But the baby's temperature gradually rose. At twenty-four hours after delivery it was 101.8°. At thirty-six hours it was 102.4. Baths were then given and the temperature fell to 101.2°, forty-eight hours after delivery, but on withholding the baths the temperature rose, so that sixty hours after delivery it was 104°. From this time it gradually fell. At three days after delivery it was only 98.8° and soon reached normal.

This represents the most benign type of fever of the new-born.

There is another type that begins later—is more prolonged and much more serious, inasmuch as it is an expression of a septic condition. From a pathologic standpoint this may be divided into two classes: first, where the child is septic when born, because of a septic condition of the mother's blood; and, second, where the child becomes septic from absorption through some unprotected channel—in the great majority of cases, through the umbilicus.

In a discussion of these fevers of the new-born two questions suggest themselves: first, what is their cause, and, second, can anything be done to prevent them? And

these lead naturally to an inquiry as to what fever is, how it is produced and what is its significance.

Krehl says:

> Fever is characterized by an increase in the temperature of the body, and by certain changes in the metabolic processes. * * * An increased production of heat within the body through excessive chemical decomposition may cause a rise in temperature. Therefore muscular exertion, which causes such chemical decomposition, even if not severe, may raise the temperature of the body.

In fever there is generally a disproportion in the ratio of heat production and heat loss, but (as Krehl says) "normally the body can dispose of much larger amounts of heat than are liberated within it during fever. So that the cause of the high temperature in fever cannot be an increased production of heat alone." There is, in a normal individual, a heat-regulating mechanism which controls or coordinates the heat production and the heat loss, and it would seem probable that in fever this nervous mechanism is disturbed or diseased, so that while there is an increased production of heat, there is at the same time a decrease in the heat loss, so that the characteristic high temperature of fever results.

"Fever may be produced by various causes, chief among which is the entrance into the blood of living or dead bacteria or of their products, yet the mere presence of microorganisms in the circulation does not necessarily raise the temperature of the body." For instance, an animal may die from an infection and its heat production may be markedly increased, and yet, on account of the corresponding increase in heat loss, there may be no rise of temperature. Though bacteria and bacterial products are undoubtedly the most important causes of fever, they are not the only ones. Fever may be produced by the destruction of larger numbers of cells in the body, even though microorganisms play no part in the destructive processes. For instance, the fever that so often follows simple fractures or large interstitial hemorrhages, or severe and prolonged muscular exertion. Krehl raises the question whether it is not possible that a single chemical substance or class of substances is the cause of all fevers.

Some have thought (incorrectly) that the fibrin-ferment might play such a role. At any rate, the proteid decomposition during fevers pursues a peculiar course, and the hypothesis that the products of this abnormal decomposition directly cause the fever is an exceedingly attractive one.

In the case quoted at the beginning of this paper, in seeking for the cause of the fever which manifested itself at or soon after birth, sepsis must be excluded. The mother was in perfect health. The child was normal, the placenta showed no signs of disease, and the cord was free from all signs of infection. Moreover, the onset of the fever, practically at birth, and the short duration, precluded the possibility of sepsis. Nor could there be any gastro-intestinal fermanifested itself so early was due to the mother's blood, contaminated as it was by the products of severe muscular exertion, acting on the heat-regulating center of the child. The fever thus produced was interesting from a clinical point of view, but yielded readily to elimination and to the antitoxic power of the normal blood.

But the septic fever of the new-born caused by infection of the cord or at the umbilicus is much more serious. It is not infrequent, but is often unrecognized.

Williams says:

"It may be stated, as a general rule, that whenever children die, without any appreciable cause within a few weeks after birth, such an infection should be suspected."

There are various views as to the pathology and history of the disease, as also as to its frequency. For instance, Dickinson says that the ratio of septic deaths to early deaths from all causes varies between 15 and 40 per cent.

Hirschfeld says that in sixty autopsies with septic infection emanating from the navel, he found arteritis alone thirty-two times, phlebitis eleven times. The two together three times and venous thrombi four times. He thinks the umbilical vein the "port of entry" of the virus.

Runge states that the lymphatics are the path of infection. He does not think it possible to diagnose arteritis during life.

Furth saw, in four years, 308 cases of arteritis umbilicalis, of which fifty-eight died. It never occurred before the separa-

tion of the cord. He says nearly all the authorities regard the processes as beginning in the perivascular tissue.

The causes of phlebitis are the same as those of arteritis. The disease may be consecutive to inflammation of perivascular tissue.

In contradistinction from arteritis, sepsis and pyemia readily occur. It also occurs after separation of the cord. Recovery occurs in the mildest cases only.

Miller reports (in 1888) that in Moscow Foundling Asylum, with the best precautions, there are yearly from 500 to 900 deaths from pyemic processes, and that there is hardly any doubt that the preponderating cause is umbilical infection.

Most of the sepsis dates from the first week of life. In cases in which death from sepsis takes place in the first three days of life, the disease must have had a prenatal origin.

Eross says that as a general truth fever is the safest and often the sole symptom of infection.

Ehrendorfer (1892) says the same.

Ahfeld (1894) says that asepsis of the umbilical cord is a failure. Suppuration of the umbilical cord cannot be prevented.

Cohn (1896) says that everything in connection with a disturbed healing process is of an infectious nature. The germs may enter by the lymphatics of the newly forming navel, by the glandulæ of the skin or even directly by the open surfaces of the vessels. And yet, as before stated, fever may be the sole symptom of constitutional sepsis, the local condition telling nothing, or indicating a healthy process.

As for treatment, it can, in a general way, be summed up under one word—"prophylaxis." After infection has occurred, as evidenced by an unexplained fever, support and elimination are the watchwords, supplemented, if you please, by local wet antiseptic dressings.

In the line of prevention Dickinson quotes a multitude of authorities, with a consequent multitude of dressings.

Fothergill advises wet antiseptic dressings. The American Text Book of Obstetrics (1896) advises antiseptic lotions (1 to 1,000 bichlorid), followed by powdered boric acid and borated gauze.

E. P. Davis says: "Cleanse with bichlorid (1 to 5,000) powder with salicylic acid and starch (1 to 5) and wrap in borated cotton. Dakin (1897) passes the stump through a square of antiseptic gauze and covers it with one or two teaspoonfuls of boric acid powder. On the other hand, Jewett (1899) teaches that after thorough drying the stump is to be wrapped in absorbent cotton. Powder is to be omitted, as it prevents rapid desiccation. After separation the surface is to be kept dry.

Whitridge Williams says:

"The stump of the cord should be thickly sprinkled with powdered boric acid and covered with a pad of sterile absorbent cotton, which should be held in place by a flannel bandage pinned tightly about the abdomen. This dressing should not be changed for some days, unless it becomes moist or soiled.

Dickinson has advised the ligation of each vessel separately. He prepares the child as for an operation. A nurse takes the cord with forceps, 6 or 8 inches from the abdomen, and makes gentle traction. The jelly of Wharton is stripped back and the sheath is cut at the cutaneous junction. Each vessel is then ligated and cut. They then retract. The skin rolls in and a dry gauze pad is placed over the wound under a roller. No powder and no antiseptic solution.

All these precautions look toward the prevention of infection, and are generally successful. But if, in spite of our precautions infection occurs, little or nothing can be accomplished by local applications. The harm is done and the struggle becomes one of endurance on the part of the child. Danger of further intoxication from the products of intestinal putrefaction must be guarded against by frequent minute doses of calomel, followed by castor oil, and the antitoxic powers of the system must be conserved and increased by free feeding and all available means. A serum or vaccine may be of benefit if the infecting germ can be isolated or recognized.

Summary.—1. Fever in the new-born, which manifests itself at or immediately after birth, may be: (*a*) transient and harmless, arising from the irritation of the heat center in the child by the mother's

blood rendered temporarily toxic by products of metabolism which are directly caused by the violent muscular action; or (*b*) it may be septic, due to prenatal sepsis in the mother.

2. Fever coming on at or soon after the separation of the cord is generally septic and depending on infection at the umbilicus.

3. This infection may enter at the open mouths of the vessel, the lymphatics or the perivascular spaces.

4. Fever may be the only symptom of the infection, the umbilicus showing no abnormal sign.

5. The treatment should be instituted immediately after birth and should be directed toward prevention of infection. If fever arises and is persistent, elimination and support are the indications.—Journal Michigan State Medical Society.

DO YOU READ MEDICAL JOURNALS.

This may, on first thought, seem an impertinent question. There are a great many physicians who do not read their current medical literature, and who are, incidentally, losers by not doing so. A traveling man recently remarked to the writer that he was often amazed when calling on physicians from day to day to find the stacks of medical journals on the office table with the covers still intact. Another traveling man said he not infrequently found the office waste basket teeming with unread journals. Is this the fault of doctors or of the journals to which they subscribe? We believe that it is mainly indifference on the part of the doctors. Many excuse their lack of interest in medical periodicals by asserting that they depend upon text-books and thus get their medical pabulum from a more authoritative source. This sounds well, but do they always do it? We believe men who are too lazy to read the journals are likewise inclined to eschew a more ponderous volume. Even the writers of text-books are not infallible. Generally speaking, we know that wisdom and truth are bound up between their lids, yet not a few text-books are simply a revamp of old and well-worn ideas embellished by the author's point of view. Even the writers of books have been known to have a paucity of experience. And this is not to be construed toward the discouragement of the reading of books; too often our silent friends on the shelves have their leaves untarnished by actual use. There may be rot in the pages and between the lines of the medical journals, but it has the advantage of being served up in small doses. Our best ideas and most recent discoveries usually find expression in the pages of the medical journals; the physician who ignores them is losing a golden opportunity. The journal can be carried anywhere so that literally he who runs may read. One medical man states that he always has a journal in his obstetric bag or overcoat pocket. Such an individual is seldom lacking in medical lore, and he usually has it, as it were, at his very finger tips. The physician who peruses a dozen medical journals for ten years can not be otherwise than the possessor of a vast amount of medical lore. Another thing, most of the articles contained in the medical magazines are of a practical trend and contain suggestions that one may incorporate into his every day work. The doctor who is disposed to look upon medical articles from a high-brow standpoint and call them **punk** should try writing more himself and see whether his endeavors are more illuminating and edifying. The effusions of the medical journal writers, even those of us exalted (?) editors, are not always marked by literary grace and appealing style, yet it is ever the aim to get down to business and offer thoughts that will in some manner prove helpful to the plodding physician. The doctor who permits his journals to sleep with their overcoats on is letting golden opportunities go by.—*Medical Summary.*

There is likelihood of injuring the deeper vessels in excising tonsils if the instrument is pressed in deeply to engage the organ rather than exerting pressure from the outside.—*American Journal of Surgery.* L

The West Virginia Medical Journal

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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Editorial

MEDICAL EDUCATION IN EUROPE

This is the title of Bulletin No. 4 just issued by the Carnegie Foundation for the Advancement of Teaching. Time is not allowed us to examine the report made on foreign medical schools by Mr. Abraham Flexner, the same gentleman who several years ago reported on the Medical Schools of this country and Canada, which report brought down upon his head many very bitter criticisms. Most of these, however, we fain believe, were written by the friends of institutions that were not doing adequate work and that lacked adequate equipment to properly train men to meet the emergencies of daily practice in our very trying profession. That report of Mr. Flexner, notwithstanding the adverse comments made, received the approval of very many who stand decidedly for the better and higher methods in medical education, and as a result of that publication not a few of the poorer medical schools have merged with others, thus resulting in schools with better equipment and a better teaching force, while others have gone entirely out of business.

A very interesting and suggestive introduction to the present report is written by Henry S. Pritchett, the president of the Carnegie Foundation. It is well worthy of careful study by all who are interested in the better training of young medical men. Notwithstanding the many improvements in our schools of medicine, we are still greatly behind the teaching of the European schools. Five years are there required in which to secure the coveted medical degree, and this study must be preceded by a higher training in preparatory work than we have yet reached. Several of our better medical institutions do require even a college degree, but these are, we believe, limited to Harvard, Johns Hopkins and Michigan University. Dr. Prichett points out the well recognized fact that the exceptional man will work out his salvation under almost any conditions, and he very justly adds that "a system of education is not to be judged by its occasional brilliant successes, but by the general level of performance of those whom it undertakes to train. * * In these countries in which the elementary and secondary school system is weak, the general level of professional education is low. * * The average of trianing will be low, and the professions will be overcrowded with a large proportion of ill-prepared men, who drag down ideals and gain their livelihood at the public expense. A sound and well-conceived system of elementary and secondary schools is a necessary precondition to good professional training Any nation that undertakes to prepare men for the professions will, in the long run, impose upon its citizens great and unnecessary hardships." No one can doubt the truth of the statements here made. Hence the necessity of raising the standard of preliminary education, as they are doing but at too slow a rate, if we would successfully compete with the institutions of Europe. By comparing the college graduates who enter the medical profession with those who have entered

it with but a limited education, the importance of this point is readily seen. The former start their professional career at a decided advantage, and as a rule outstrip the others in the race of life. We must always keep in mind the brilliant exceptions, which only prove the rule.

The difficulties of the modern medical course are very great. It is crowded to the limit of the capacity of even the liberally educated man, and must be exceedingly difficult for the man with the poorly trained mind. Even with well trained students, as Dr. Pritchett remarks, the "medical school cannot turn out finished doctors; it cannot teach all that it is important for the practitioner to know. Under these circumstances it is best to accept frankly certain limitations, and so to train its students that they will be disposed subsequently to remedy their own deficiencies;" and certainly the liberally educated will be more apt to seek remedies for their deficiencies than will those who lack preliminary education, and will be more apt to find them also; another reason for raising the standard of preliminary requirements.

Dr. Pritchett suggests that the people choose their medical advisers with too little consideration. They do not stop to inquire as to their education and medical training, simply taking the advice of some friend. How often, alas, do the incompetent succeed rapidly because possessed of the arts of the fakir, while the man of merits fails because of inherent modesty. Dr. P. rightly regards the medical as a quasi-public profession, because "it is of such enormous importance to society, carrying with it such opportunities for good or ill." The people need to educate themselves in the choice of a physician, and they should seek that one or those, rather, who have enjoyed adequate preparation, and whose character and habits of study give promise of growth and development along proper lines.

A great duty rests upon the State in matters of medical education. Governments are instituted for the general good and protection of the people. Although much has been done by the erection of State Boards of Health and the compulsory examination of candidates for license to practice, yet much remains to de done. "At the present time, in the United States, the conditions under which medical practice may be entered upon vary widely. Each State is a law unto itself, and no agreement will prevail until the people of the various States have come to some general conception of their responsibilities. The obligations to enact statutes fixing reasonable conditions upon which the practice of medicine may be undertaken rests not only upon the necessity for preserving a high level in the profession, but also upon the fact that only by effective legislation can the general public be adequately protected from exploitation by an army of ill-trained doctors, quacks, and charlatans." It is true that no country, however high its standard of medical education, is free from impostors in medicine; but these will certainly be fewer as the standard is raised, and even if dishonesty continue, the practitioner will be of a higher grade and hence the people will be more apt to get better service. But how is it when, as pointed out by Prichett, a number of our leading cities tolerate medical schools that pretend to train doctors, despite the fact that they are almost wholly without clinical facilities. "If the lowest terms upon which a medical school can exist abroad were applied to America, three-fourths of our existing schools would be closed at once," says Dr. P., who very truly adds, "and the remaining fourth would be easily and entirely adequate to our needs."

There is much more in the Bulletin that is worthy of attention, and we may take occasion to refer to it again. For the present we may suggest that our medical schools need to require a higher educationel standard for their students; they need a better equipment to add to their teaching efficiency; they need to lengthen the medical course; they need to provide greater clinical facilities, and as soon as possible, a post-graduate hospital training for every graduate. The people need to learn how to distinguish a well-equipped doctor when they see him and learn of his opportunities. The

States need to perfect their laws for the protection of the people against poorly prepared doctors; and they need to enact severe measures against dishonesty in practice, so that the people may not be exploited by the ignorant and the dishonest imposter. S. L. J.

PROSPERITY.

We are glad to report that more members have paid up to date than ever before in the history of the Association. We have reached the eight hundred mark, with nearly two hundred of the old members as yet unpaid. The great majority of these are the old reliable, many of whom have not paid because the local secretary has not asked them to do so. Others are the tardy ones who will, at the final day of judgment, be found among the trailers, some reaching the golden gate just after it has been closed against all comers. In Ohio County society are a number of the first kind, and a few of the others, and some so busy making money that they forget to spend it.

As the annual meeting comes this year several months ahead of the usual time, there is reason for the greatest encouragement as to the future of the State Association. The members should not forget that no society can have representation in the State Association except for paid members. In view of this fact the local secretaries should make a final appeal to the delinquents, that we may show a large membership, and that the local societies may have the fullest representation in the House of Delegates.

Several of the societies have taken a vote on the Defense plan, and decided in its favor. We believe this plan has come to stay, and we also think that to this may be attributed the early payment of so many members, and the addition to our membership of over one hundred who were not members last year, or who failed to pay their dues last year. Now is the time to make a special effort to increase our numbers. We suggest that the Committee on Defense prepare a letter setting forth the benefits of our defense plan, and send it to every member of the profession in the State who is outside our medical organizations. This should be done at once, and doubtless would have been done before this but for the discussion of the defense plan, which has left some doubt as to its permanence. There being now no doubt as to this, let the committee move, and we are confident that our membership will be greatly increased, and that speedily. Last month's Journal went to four hundred non-members. There are still perhaps five hundred practitioners in the State who have never seen a copy, or at least not since it became a monthly. Since we now have the new American Medical Directory as a guide, we hope to reach each of these with a copy soon. With the defense which the Association offers and a free monthly Journal, we should soon have a membership double the present, if proper efforts are made to bring them in. If every county secretary will send us the names of all eligible physicians in their respective districts, we shall aim to let them know what we are doing for the good of the profession.

Collect all dues, come to Webster Springs, bring along all the good papers you can get hold of, whether on the program or not, and you will have the time of your life. S. L. J.

We can still save a little money for any who may be thinking of attending a Post-Graduate School in New York.

We regret to announce the death from cancer of the liver, of Dr. E. E. Ricketts, of Cincinnati. The doctor was well known to W. Va. physicians, as he has attended several of our State Association meetings. The doctor was an excellent surgeon, a good talker, and a very genial gentleman.

The State Federation of Labor, at its recent meeting in Wheeling, unanimously adopted this resolution:

Be it Resolved, By the State Federtaion of Labor, in annual convention assembled, that we hereby declare against the ratification of the Constitutional Prohibition Amendment, and hereby most earnestly appeal to all tradesmen and their friends to use all honorable means to defeat

said Constitutional Amendment at the general election to be held in November next.

This action means that those who pose as the working man's friends have resolved in favor of retaining the poverty, sickness, crime and distress among working people, that are the direct result of the drink habit; and that the working man's growing children shall have the same opportunities that their fathers have had to form the habit that will inevitably drag them down to poverty and disgrace. Shame on such "working men's friends," say we.

On June 6th at Atlantic City, during the meeting of the American Medical Association and following a symposium on anesthesia, the National Society of Anesthetists was organized, with the following officers for year 1913-13: President, James Taylor Gwathmey, of New York; Vice President, Charles K. Teter, of Cleveland; F. H. McMeechen, of Cincinnati; Yandel Henderson, of New Haven; Secretary, William C. Woolsey, 88 Lafayette Ave., Brooklyn; Treasurer, Harold A. Sanders, of Brooklyn.

All qualified in the estimation of the executive committee, shall be considered as charter members if presented within a period of sixty days and accompanied by the levied due of three dollars.

The National Society of Anethetists in this notice calls all those who are actively interested in this work to join its ranks and assist in developing the subject of anesthesia to greater perfection and more uniform safety.

At the eighty-first annual commencement of Wesleyan University at Middletown, Conn., held on June 19th, the degree of doctor of laws was conferred upon Dr. Amos J. Givens, proprietor of Givens Sanitarium for nervous diseases at Stamford, Conn.

ANALYSIS OF ECKMAN'S ALTERATIVE.

Believing that physicians can best warn the public as to the worthlessness of patent medicines when they know their composition, the most vicious ones are being analyzed in the Chemical Laboratory of the American Medical Association. In line with this Eckman's Alterative, a "consumption cure," has been analyzed (*Jour. A. M. A.*, April 27, 1912, p. 1298). The report shows that this preparation, eight ounces of which sells for $2.00, is essentially a solution of calcium chloride and therefore absolutely worthless for the treatment of tuberculosis. The harm done by patent medicines is concisely and forcibly stated as follows:

The inherent viciousness of fraudulent consumption cures lies in the fact that they lead the sufferer to abandon or ignore those hygienic and dietetic measures which are his only hope. It is not easy, it is not always comfortable, it is frequently disagreeable to follow the treatment which experience has shown to give the only hope of success. It is much easier to continue living the life which, in so many cases, has been responsible for the consumptive's condition; merely taking at stated intervals a medicine which its manufacturers declare to be all that is necessary to bring about recovery.

Hoping against hope that in the "consumption cure" nostrum the secret has at last been wrested from nature by which the White Plague may be vanquished, the ever-optimistic consumption sacrifices money which should go into good food, sacrifices all too precious time, and finally life itseelf, and the consumption cure faker waxes rich in the toll of blood exacted from his credulous victims.

SOME OFFICERS OF THE NATIONAL LEAGUE FOR MEDICAL FREEDOM.

So many inquiries have been received for information regarding the National League for Medical Freedom that it has seemed worth while to collect such matter as has appeared in *The Journal* and issue it in pamphlet form. As a preface to this reprint, some biographic information is given regarding certain officers of the league. We reproduce this matter herewith, as it may help explain one of the many reasons for the opposition shown by this organization to the American Medical Association and its activities.

B. O. Flower, Boston: President and one of the founders of the National League for Medical Freedom. Flower is ex-president of the R. C. Flower Medicine Co., a mail order medical fake, founded by the notorious quack and swindler, R. C. Flower. R. C. Flower is a "graduate" of the notorious American Health College recently exposed in *The Journal* in connection with Carson, the Kansas City quack. While B. O. Flower was owner and proprietor of the *Arena*, that magazine carried advertisements of such frauds as the J. L. Stephens morphin cure (exposed in "The Great American Fraud), New York Institute of Physicians and Surgeons (put out of business by the government and exposed in "Nostrums and Quackery"), Welch's Magic Tea, Trilene Tablets, Clark's Rheumatism Cure, etc. His later magazine, the *Twentieth Century*, advertised that preposterous fraud, the "Oxydonor," exposed in *The Journal* and in "Nostrums and Quackery."

C. W. Miller, Waverly, Ia.: Second vice-president of the National League for Medical Freedom. Miller publishes a newspaper that carries advertisements of such nostrums as Winslow's

Soothing Syrup, Doan's Kidney Pills, Lydia Pinkham's Vegetable Compound, Pierce's Favorite Prescription—all of which have been exposed by the American Medical Association. While in the Iowa legislature, Miller is said to have voted *against* (1) a pure food bill, (2) a bill that made the law relating to the sale of poison more rigid, (3) an act to regulate the sale of "patent medicines," (4) a bill to prevent the depositing of samples of "patent medicines" in private or public places—a bill that was formulated largely because of the deaths of children who had taken the sample packages left in yards and on porches. Miller is also alleged to have opposed bills that required the use of pure ingredients in ice-cream.

Reynold E. Blight, Los Aangeles: Chairman, Southern California Branch of the National League for Medical Freedom. Blight's name appears in connection with the "NaturAID Health Utilities Company," which does a mail-order business in curing "rupture, fallen womb, all deformities, malformation, floating kidney, large abdomen, constipation, all stomach troubles and all male and female weaknesses." Blight's name is also used by this concern in its attempt to sell its stock to the public.

Charles Wentworth Littlefield, M.D., Seattle, Wash.: Chairman of the Washington branch of the National League for Medical Freedom. Littlefield exploits the "Twelve Devitalized Tissue Builders," which are to be used "in curing all mental and nervous diseases." He advertises that "any organ or tissue of the body can be reconstructed and its functions 're-established by the use of Twelve Devitalized Tissue Builders. So also can any disease be cured by their use." He gives mail-order "treatments."

Frederick Wallace Abbott, M.D. (F.S.Sc., Lond.), Taunton, Mass.: Member of the Advisory Board of the National League for Medical Freedom. The letters, "F.S.Sc., London," after a person's name, indicate that the individual is a "fellow" of the "Society of Science, Letters and Art" of London. This so-called society is a serio-comic fake which issues "fellowships" with an elaborate "diploma of merit" thrown in, at $5 apiece. The "diplomas" seem to be so much sought after by "patent medicine" fakers. (See *The Journal,* May 29,1909, and the book "Nostrums and Quackery," published by the American Medical Association, for further details concerning this fake "society.")

C. S. Carr, M.D., Columbus, O.: Member of the Advisory Board of the National League for Medical Freedom. Carr has been in the employ of the Peruna concern for years. He is editor of a pseudo-medical sheet in which some of the worst medical frauds in the country have been advertised. Many of these frauds have been exposed in *The Journal.* Carr does a mail-order medical business of his own, selling what he calls "tissue remedies." (See "The Great American Fraud," published by the American Medical Association for further data on Peruna; also see *The Journal,* Dec. 9, 1911.

George P. Englehard, Chicago: Member of the Advisory Board of the National League for Medical Freedom. Englehard publishes two journals which have long defended the "patent-medicine" interests and which have carried advertisements of some of the worst frauds in the nostrum business. Both of these publications have been exposed in "The Great American Fraud" and in *The Journal.*

Charles Huhn, Minneapolis: Member of the Advisory Board of the National League for Medical Freedom. Huhn was president of a co-operative "patent medicine" concern, known as the American Druggists Syndicate, whose methods have been repeatedly exposed in *The Journal.*

A. F. Stephens, M.D., St. Louis: Member of the Advisory Board of the National League for Medical Freedom. Stephens was second vice-president of the Converse Chemical Company, a St. Louis nostrum concern which, a few years ago, tried to get advertising space in exchange for its treasury stock and offered to give away one share of its stock with every bottle of its nostrum. This concern was exposed in *The Journal,* Jan. 12, 1907, p. 144.—*Jour. Am. Med. Ass'n.*

THE RETURN FROM THE COUNTRY

Almost every city family, whose exchequer will permit, is accustomed to spend a goodly portion of the heated term away from home. This is both natural and salutary, provided good judgment is exercised in the selection of the country place or summer resort, as regards its general healthfulness and sanitary environment. Unfortunately sanitation on farms and in rural communities is not always what it should be and the result is that many health and pleasure seekers return in the autumn depressed and run down or perhaps infected with malarial or typhoidal poison. In other cases, especially at crowded fashionable resorts, because of the continual round of exciting amusements, some are tired and fagged out instead of rejuvenated as the result of their summer's outing. Many are certainly in need of that general constitutional reconstruction and building up of force and resistance which is necessary to withstand the business or social strain of the fall and winter. In such cases there is no one single remedy quite as dependable as Pepto-Mangan (Gude). It increases appetite, restores strength and general vitality, reinforces the hemoglobin content of the blood and acts as a prompt and efficient general tonic and reconstituent for patients of all ages.

Professor Davenport in his admirable work on the Diseases of Woman, Dr. I. G. Boyd, Tunnelton, Ind., reviewing adds:

"How can we prevent dysmenorrhea? It can be done by keeping the patient under morphine, but this is a barbarous solution of an important problem. It in fact, does not solve it. Morphine is inadmissable and improper in these cases. It produces derangement of the secretions and tends to establish a drug habit that will make a life a burden. I have long employed a remedy that not only relieves the pain, but produces no habit, and is not dangerous. I re-

fer to Dioviburnia. It is a most valuable uterine tonic, antispasmodic and anodyne of exceptional worth. I rely upon this remedy to prevent dysmenorrhea, which as Professor Davenport truly says is seen in almost all, if not all women. I have my patients who suffer with dysmenorrhea to take Dioviburnia, beginning two days before menstruation is due and persist in it until the period has passed. I give it in doses of one to two teaspoonsful every three hours throughout this time. When this direction is followed I have found that my patients go through the period without pain. The adoption of this treatment I may say also, has brought me many grateful compliments.

"Where the patient is very nervous having the tendency to hysteria, neuroses or uterine congestion, I administer Neurosine one part, in codbination with two parts of Dioviburnia, which always gives relief."

State News

THE WEBSTER SPRINGS ANNUAL MEETING.

DAVIS, W. VA., June 20, 1912.

To the Editor.

Last year at White Sulphur Springs, and the year preceding at Parkersburg, there was some friction regarding hotel rates. To avoid anything of the kind this year, the hotels were asked to submit rates in writing. Some of the cheaper hotels declined to do this. The Webster Springs and several other hotels did submit their rates in writing, and these will be found on the program. The Webster Springs Hotel will be the headquarters for all meetings which will be held in Convention Hall.

The Committee on Arrangements have submitted some information relative to railway facilities which is here presented. A. P. BUTT, *Sec'y.*

RAILROAD FACILITIES.

The W. Va. Midland R. R. will connect with all trains over the B. & R. at Holly Junction, W. Va. The rates on this road are filed with the Interstate Commerce Commissioners in conjunction with the B. & O. and all other trunk lines in this state, are on file at all leading stations, from which a round trip excursion, season ticket may be obtained at greatly reduced rates.

HOW TO REACH WEBSTER SPRINGS.

For the convenience of the local roads it would be best for all parties from Wheeling, Parkersburg, Fairmont, Morgantown, Grafton and other points east and west of Clarksburg, and all other points in the northern part of the state, to come to Clarksburg, Monday, July 8th, and leave Clarksburg over the B. & O. at 6 a. m. Tuesday, July 9th, arriving at Webster at 12:00 m.

All persons not connecting with this train from above points may connect with the next train leaving Parkersburg at 11:30 a. m., and arrive at Webster at 5:50 p. m.

Those in the southern part of the state could leave Charleston on Tuesday, July 9th, at 6:25 a. m. over the Coal & Coke via Sutton, and arrive at Webster Springs at 5:50 p. m.

Those from Elkins will leave over the Coal & Coke at 8:30 a. m. and change at Orlando to the B. & O. and arrive at Webster at 5:50 p. m.

Those from points on the Western Maryland road, south of the B. & O. trunk line, should arrive at Elkins Monday evening, also those from points on the Greenbrier division of the C. & O. should come by Elkins, arriving there Monday evening, and taking the C. & C. on Tuesday morning as above directed.

RAILROAD RATES.

On many of the roads excursion tickets are for sale throughout the entire summer. For instance, the B. & O. round trip rate from Shenandoah Junction is $13.35, Huntington $13.40, Wheeling $9.20.

The C. & O. will give a rate of two cents per mile to Charleston and Huntington, good to return by 16th.

The Virginian will give a rate of four cents per mile based on one way distance.

HOTELS.

Webster Springs Hotel—	
Without private bath	$2.50
With private bath, one in a room	3.50 to $4.00
With private bath, two in a room	3.00 to 3.50
Oakland Hotel	$1.25
Valley House and Rutherford Hotel.	1.00
Skidmore House, Gregory House, Benedum House and Miller House	.75

PROGRAM

OFFICERS OF STATE MEDICAL ASSOCIATION

President, C. O. Henry, Fairmont.
First Vice President, R. E. Venning, Charlestown.
Second Vice President, Charles O'Grady, Charleston.
Third Vice President, H. W. Daniels, Elkins.
Secretary, A. P. Butt, Davis.
Treasurer, H. G. Nicholson, Charleston.

COUNCILORS.

First District—H. P. Linsz, Chairman; H. R. Johnson.
Second District—W. H. Yeakley, R. H. Edmondson.
Third District—P. A. Haley, B. B. Wheeler.
Fourth District—W. S. Link, C. D. Jeffers.
Fifth District—Sam'l R. Holroyd, J. E. Rader.

COMMITTEES

SCIENTIFIC WORK

The President and Secretary.

PUBLIC POLICY AND LEGISLATION

First District—O. F. Covert, L. N. Yost.
Second District—E. W. Strickler.
Third District—G. A. McQueen (Chairman), V. T. Churchman.
Fourth District—A. S. Grimm, Rollo Camden.
Fifth District—T. W. Moore, J. E. McDonald.

MEDICAL DEFENSE

W. W. Golden (Chairman), L. D. Wilson, J. W. McDonald.

MEDICAL EDUCATION

C. A. Wingerter (Chairman), C. L. Holland, Jas. R. Bloss.

PUBLICATION

S. L. Jepson, L. D. Wilson, C. A. Wingerter, G. D. Lind.

COMMITTEE ON RECEPTION

Drs. D. P. and J. C. Kessler, Jas. and W. D. McClung, Judy, Hill, Vean, Echols, Allen, Dodrill, McCutcheon, Deeds, Bennett and Brown.

COMMITTEE ON HALLS

S. P. Allen, W. J. Judy, J. B. Dodrill.

COMMITTEE ON ENTERTAINMENT

Jas. McClung, S. P. Allen, W. E. Echols, J. B. Dodrill, Homer Brown.

MEETING OF THE HOUSE OF DELEGATES

The House of Delegates will meet in the parlors adjoining the Convention Hall of the Webster Springs Hotel.

First meeting—Tuesday, July 9, 9 p. m. and subsequently from time to time as designated by the president.

ORDER OF BUSINESS

Call to order by President.
Receiving credentials.
Appointment of Business Committee.
Rport of the
Secretary,
Treasurer,
Council,
Committee on Arrangements,
Committee on Scientific Work,
Committee on Public Policy and Legislation,
Committee on Malpractice Defense,
Committee on Publication.
Report of Auditing Committee,
New business.
Election of officers. (First business Friday morning.)
Selection of next place of meeting.
Unfinished business.

GENERAL MEETING

Convention Hall, Webster Springs Hotel, Wednesday, July 10, 9:30 a. m.
Call to order by the President, Dr. C. O. Henry, Fairmont.
Invocation by Rev. G. W. Marsdon.
Addresses of Welcome—Mayor J. M. Hoover, of Webster Springs, Hon. E. H. Morton.
Response—
Address by the President, Dr. C. O. Henry.
New Business to be referred to House of Delegates.
Adjournment.

WEDNESDAY, 2:30 P. M.

The Oration in Medicine.

Auto-Intoxication; Its Influence Upon the Development of the Human Body—W. Holmes Yeakley, Keyser.

Etiology, Pathology and Treatment of Rheumatism and Allied Conditions—W. J. Judy, Webster Springs.

Leukemia: With Report of Cases—O. D. Barker, Parkersburg.

Hemorrhoids—E. T. Hall, Freemansburg.

The Symptomata and Importance of Early Diagnosis in Incipient Tuberculosis—A. H. Kelly, Colorado Springs, Colo.

Pyorrhea—C. H. Chapman, D.D. S., Webster Springs.

Sciatica—Gilman R. Davis, McDonald.

WEDNESDAY, 8 P. M.

Public address, Convention Hall.

The Obligation of the Public to the Medical Research Laboratories—Frank LeMoyne Hupp, Wheeling.

THURSDAY, 9:30 A. M.

Prophylaxis in Aural Diseases and Their Complications—S. McCuen Smith, Philadelphia.

Cancer; A Motile Germ and the Meaning of This Fact to the Clinician—G. W. Massey, Phila.

Septic Sore Throat—W. S. Link, Parkersburg.

The Diagnosis and Treatment of the Commoner Forms of Renal Disease—L. F. Barker, Baltimore.

Some Recent Factors of Safety in Surgical Operations—J. S. Horsley, Richmond.

The After Treatment of Surgical Cases—C. S. Hoffman, Keyser.

THURSDAY, 2:30 P. M.

Oration in Surgery.

The Surgery of Our Own Country—E. W. Strickler, Kingwood.

Some Points in Gall Duct Surgery—G. C. Rodgers, Elkins.

Cholelithiasis and Pancreatitis; Their Surgical Treatment—T. K. Oates, Martinsburg.

Pelvic Injuries: Report of Cases—H. P. Linsz, Wheeling.

The Treatment on Non-United Fractures—R. H. Durn, Huntington.

Address by a member of the Association of Military Surgeons of the United States.

Aneurysm of the Arch of Aorta; Demonstration of Specimen—J. Ross Hunter, Hansford.

Tracheotomy; a New Tube Pilot and Retractor for the Emergency Operation—F. L. Hupp, Wheeling.

FRIDAY, 9:30 A. M.

Hemorrhage of the New Born—S. G. Moore, Elkins.

The Non-Surgical Treatment of Lacerated Cervix—R. H. Pepper, Huntington.

Placenta Praevia—Harry M. Campbell, Parkersburg.

The Upright Position of Patient After Labor—William S. Gardner, Baltimore.

Eclampsia; Report of a Case Treated by Transfusion and Lumbar Puncture—A. P. Butt, Davis.

Secondary Hydrocephalus; With Report of a Case—R. H. Edmundson, Morgantown.

FRIDAY, 2 P. M.

Observations of a General Practitioner Entering Institutional Work—Charles A. Barlow, Spencer.

Paresis, or General Paralysis of the Insane—A. H. Kunst, Parkersburg.

The Etiology and Prognosis of Insanity—Jas. R. Bloss, Huntington.

The Prevention of Nervousness in Children—Tom A. Williams, Washington, D. C.

The Treatment of Enlarged Prostate—J. E. Cannaday, Charleston.

Actinomycosis—A Report of Two Cases and a Review of Literature—W. W. Golden, Elkins.

Helpless—C. H. Maxwell.

Voluntary papers.

ENTERTAINMENT.

July 10th, 3 p. m.—Bowling contest for ladies; married vs. single.

July 11th, 10 a. m.—Ladies' card party, hotel parlors.

3 p. m.—Bowling contest for men; married vs. single.

9 p. m.—Ball given by the Nicholas-Webster Medical Society.

July 12th, 2 p. m.—Ball game; fats vs. leans.

8:30 p. m.—Special dinner at Webster Springs Hotel.

Society Proceedings

CLINICAL SOCIETY OF NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

MEETING OF MARCH 4TH, 1912.

Case of Foreign Body in the Eye: X-Ray Localization: General Infection of the Eye Controlled by Urotropin.

Case presented by DR. EARL CONNER.

The patient, a young man of 22, called upon Dr. Conner, with a history of being employed in hammering or using a chisel on a piece of cold steel. A piece of the metal flew and struck him in the eye. When seen four days later, the eye was swollen, and painful: the anterior chamber was filled with pus and on the nasal side of the globe there was a minute punctured wound about 4 mm. in size. The patient had not slept the night before. He was informed that the eye was infected and that in all probability would be lost, though every effort would be made to save it.

On admission to the hospital, the test was made with the Giant Magnet. The result, however, was neither positive nor negative. If there is a foreign body in the eye it is apt to give pain on being brought into the field of the magnet. In this case the temporal side of the eye was brought into the field of the magnet, and the patient experienced sharp pain, but after a dozen of trials no foreign body could be located at any point. The patient was put to bed, given atropine and hot applications of calomel.

The pupil was dilated and pus in the anterior chamber absorbed, and the interior of the eye examined. A yellow reflection was obtained, which was evidence of infection of the vitreous. The inflammation increased from day to day, up to the tenth day before it was possible to control it. After the patient was put to bed he was given calomel, followed later by seven and a half grains of urotropin three times a day for two weeks. This drug has been administered in a large number of cases of eye infection with very favorable results. Dr. Conner said that he had had three cases of eye infection in the past few weeks in which the infection had apparently been controlled by the use of urotropin.

Skiagraphs had been made of the eye for the purpose of determining the presence or absence of a foreign body. The size of the foreign body as determined by the skiagraph was 1 mm. by 1½ mm.

As a rule these cases go on to the loss of the eye. An infection of the vitreous is seldom or never arrested. The usual termination is perforation of the eye and hemorrhage. The inflammation in this instance had been controlled, the pain relieved, the patient has perception of light, and there is hope of saving the eye.

Two cases presented by DR. C. G. CHILD.

Operation subsequent to Gilliam operation.

Dr. Child reported two cases operated on by the Gilliam method which had returned after being operated upon. He said that neither case had been relieved by this method, and were suffering from pelvic pain with dragging on the abdominal wall and this in spite of the fact that both operations had been done by most competent men.

Dr. Child said that he objected to the operation as the intestines and omentum later became incarcerated in the pelvis. It produced pathological conditions which were worse than the original displacement of the uterus. Varicose conditions followed and an even worse state of things supervened in the formation of pockets in the pelvis.

In both of the cases he reported, pockets had formed in one of which the sigmoid was very extensively adherent, and constipation had been obstinate.

Dr. Tovey said that Dr. Wells used to do the operation until he found that the patients came back with the uterus in the same position, and all the troubles increased, or else they complained of pain in the side where the ligaments were attached. They had abandoned the operation.

Hematuria in a Multipara: Unknown Cause.

Presented by DR. WARD B. HOAG.

Dr. Hoag reported a case of hematuria in a multipara, forty years of age, in her fourth pregnancy. At six and a half months she developed without any discomfort a considerable quantity of blood in the urine. Beyond the presence of blood there was no pain or discomfort of any kind.

The patient was put to bed, irrigations of alum solution used, and rest enjoined for ten days. It had no effect on the bleeding. She went on to full term and was delivered in a perfectly normal way. The hemorrhage continued for two

weeks after the child was born, and then stopped as suddenly as it had begun. Dr. Hoag thought it was the result of intra-abdominal pressure, perhaps the rupture of a small blood vessel. The same night there was a little fleshy plug passed in the urine which was the only thing ever seen, and coincident with this the hemorrhage stopped and has not since returned.

Dr. Shears said that although the hemorrhage might be due to toxic conditions, in the present instance there were no signs of a toxemia. Ruling out local papilloma or a ureteritis, he thought that six and a half or seven months was not too early to exert pressure symptoms sufficiently severe to produce hemorrhage. From a careful examination of the bladder and the absence of stone or other aggravating cause he should be inclined to attribute the bleeding to this cause.

MEETING OF APRIL 1ST, 1912.

Three Cases of Sterility Secondary to Adnexa Disease: Cured by Operation.

Presented by Dr. Henry V. Holcomb.

These three cases were of interest as showing what could be accomplished by conservative work.

The first case was a woman 19 years of age who had had a previous miscarriage in the sixth week of pregnancy and grave symptoms showing pelvic trouble. Operation by Dr. Child showed both ovaries bound down by adhesions, a cyst attached to the left tube, and the tubes closed. The cyst was evacuated, the adhesions broken down, and the tubes probed with a fine bougie their entire length. Convalescence was uneventful. Four months after the operation she was free from any abdominal symptoms. Menstruation regular. She later showed symptoms of a floating right kidney which was anchored by three silk stitches. Convalescence from this operation was also uneventful. February 2nd, she had her last menstruation, and by the end of March she began to have morning vomiting with swelled breasts, and all the evidences of pregnancy. She had a precipitate delivery of a seven and a half months foetus in the following August. The child died but the mother is alive and well.

The second case was somewhat similar. The patient came with all the abdominal symptoms of inflammation of the apendages. Dr. Child found on operation that both ovaries were prolapsed and bound down by adhesions, occluding the tubes. After her operation she returned home well. One month after the operation she became pregnant and was delivered of a full-time child.

The third case was a woman of 31 years of age who had been sterile for thirteen years. She had a former child and was anxious to have another. She had pelvic pains bilaterally, painful and profuse menstruation, which had been present for the previous four years. Examination showed a retroverted uterus and tender appendages. Local treatment gave no relief. Operation in 1909 by dilatation, curettage, followed by laparotomy showed the same adhesions of ovaries, with closed fimbriated extremeties as in the other two cases. The same method of treatment was followed, and the patient made an uneventful recovery. She gained in weight after the operation, and in the following November was delivered of a normal child.

None of the above three cases came to be operated upon for sterility, but Dr. Holcomb laid stress upon the desirable outcome of cases who have primarily adnexal trouble, and in the correction of this secured the desired pregnancy. Dr. Holcomb said that as far as could be ascertained these cases were free from gonorrhea.

Dr. Child said that the cases reported were very interesting to those who were striving for the correction of sterility where the fertility of the husband was unquestioned. He had felt that it was important to thoroughly probe the tubes in these cases to insure an absolute patency. With the adhesions of the adnexa corrected, malpositions replaced, and the toilet of the uterus complete, he thought that there was field of work open to the careful and discriminating surgeons, which would be effective in overcoming some hopeless cases of sterility.

Dr. Holcomb in closing the discussion said that the tubes were absolutely closed and the fimbria clubbed so that in the ordinary course of events pregnancy would have been impossible.

Reviews

THE IMMEDIATE CARE OF THE INJURED.—Second Revised Edition. By ALBERT S. MORROW, M.D., *Adjunct Professor of Surgery in the New York Polyclinic.* Octavo of 354 pages, with 242 illustrations. Philadelphia and London: W. B. Saunders Co., 1912. Cloth, $2.50 net.

We learn in the preface that the object of this volume is "to furnish a reliable guide for those who wish to learn how to render safe and efficient aid in accidents and emergencies." The fact that this is the second edition shows that there is a demand for the work.

The book should appeal to a limited class of physicians; i.e., those having small libraries and so situated as to have but little emergency work; to nurses; to those whose business it is to have a *very considerable* knowledge of emergency work—such as sailors, soldiers, marines, and campers far removed from any medical aid.

The book is divided into three parts. Part first contains 107 pages devoted to anatomy and physiology. This part is too technical and profuse for the needs of the laity.

One wonders what effect is produced on the layman's mind by the words cortex, mapighian tubule, neuron, axon, dendrite, neuraxis, conus medularis, filum terminale and others of like caliber.

Part two contains 67 pages devoted to bandaging, dressings and practical remedies. This part is not quite as explicit as it should be for those whose training has not reached an advanced stage. The general idea seems to be that those

in attendance will possess a fairly complete first aid packet. As we know, this is often conspicuous by its absence. (Quite recently I was asked over the phone to direct the dressing of a compound fracture. The people were well-to-do but had absolutely nothing in the way of ordinary dressings. However, I am not sure that I would have directed them differently had they been possessed of ever so much. I told them to take a large clean towel, hold one end in each hand, let the middle rest in a basin of boiling water for five minutes. Hold in the air long enough to be cool. Apply without touching with the hand.)

Part three contains 153 pages on accidents and emergencies. This is well written, especially the chapter on poisons, and the last chapter, which is devoted to methods of lifting and transporting the sick and injured. This, as well as the entire work, is profusely illustrated.

In the treatment of wounds one wonders why the modern method of painting the skin with tr. iodine and handling or touching the wound itself with absolutely nothing, unless it be a pair of sterile forceps, is not mentioned.

To sum up—for those whose business it is to become *thoroughly efficient* in first aid work the book is to be highly commended.

Remembering that "fools rush in where angels fear to tread" and "that "a little knowledge is a dangerous thing" I believe the average layman is better off without such a book.

I should dislike to have this book in the hands of a patient whose wound or fracture had not done quite so well as I had hoped. How surely I would be condemned in case I had not followed exactly the procedures outlined. If my patient were a woman and she happened to have a stitch abscess, would she not turn to page 151 and there read that adhesive straps were as good as sutures and "they also have an advantage over sutures in that scars resulting from stitches are avoided."

The lay man can not understand that there are no hard and fast rules for the treatment of injuries, that no two surgeons would treat a case exactly alike, that the accepted practice of today is obsolete tomorrow.—BUTT.

COMPENDIUM OF DISEASES OF THE SKIN, based on an anlysis of 30,000 consecutive cases, with a therapeutic formulary. By L. DUNCAN BULKLEY, A.M., MD., *Physician to the N. Y. Skin and Cancer Hospital; Consulting Physician to the N. Y. Hospital; Consulting Dermatologist to the Roosevelt and Randall's Island Hospitals, and to the Hospital for Ruptured and Crippled, etc.* Cloth, $2.00.

Any work that survives thirty years and requires five editions to meet the demands of the profession must be pretty well known and contain much information that is helpful regarding the important subject of skin diseases. The author lays stress upon the often overlooked importance of the relation of skin manifestations to internal and constitutional diseases. The expression of personal knowledge of so extensive observation carries conviction that the information contained in this book is reliable and the advice dependable.

Regarding the therapeutics of skin diseases, the author's own words are classic. He writes: The only basis of rational and successful therapeutics is a thorough knowledge of disease, and of the action of remedies, separate and combined; accuracy of diagnosis is indispensable for the successful management of skin affections. In the Therapeutic Formulary will be found many useful prescriptions. The chapters on Hygiene and Diet are especially worthy of note. Colored plates would generally add to the advantage of the text.—R. H. E.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume I, Number II. Octave of 291 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1912. Published Bi-Monthly. Price per year: Paper, $8.00. Cloth, $12.00.

The second number of the clinics covers a wide range of important surgical subjects. Ununited fracture is given much attention and might be said to be a special feature of this issue. At this time, when medical journals teem with this subject and the use of plates, it is timely and of exceeding interest to have placed before the profession in clinical fashion the pathology, the advanced methods of treatment, the wise and sane conclusions of this master teacher. It is a subject which appeals to every physician, since the responsibility in fractures is very great and no one can afford to remain unfamiliar with the new ideas and improvements in fracture treatment, as they are given here by Murphy in his own convincing way. Joint ankylosis and a score of other subjects are discussed in like interesting manner. R. J. R.

TRUTHS—TALKS WITH A BOY; CONFIDENCES—TALKS WITH A GIRL; FALSE MODESTY, THAT PROTECTS VICE BY IGNORANCE. By DR. E. B. LOWRY. Forbes & Co., Chicago. Each 50 cents.

The above are three small books on social hygiene, the titles of which indicate their character. We have real all with interest They are well suited to be read to young people by parents or others, or they may be safely put in the hands of the young. They contain nothing to offend the most modest, and very much information that is much needed, and that will help to put young people on guard against evils that tend to drag them down to disease and disgrace. The world needs such teaching, and is just awaking to its extreme importance. The books should have a wide circulation.—S. L. J.

Hard tonsils preponderating in connective tissue, are better removed by the cold snare than a sharp instrument. The snare closes the blood vessels; the tonsillitome opens them.—*American Journal of Surgery.*

Medical Outlook

THE AFTER-TREATMENT OF MISCARRIAGE.—Dr. Ernest Boyen Young and Dr. John T. Williams present a study of the value of intrauterine douches, packing and antiseptics in the treatment of miscarriage (*Boston Med.* and *Surg. Jour.*) *based* upon 2,000 cases. This study does not include cases in which there had been no operative procedure, nor cases of advanced sepsis. They denominate as "clean" cases with essentially normal temperature and as infected those with a temperature of over 100.4 F. Their results are: 1. Salpingitis was more common after intra-uterine douches. 2. Intra-uterine douches of sterile water or salt solution did not give as good results as simply wiping the uterine cavity with sterile gauze. 3. Antiseptic douches gave poorer results than simple sterile solutions. A possible explanation of this fact is that the antiseptics used favor the coagulation of albumin, thus sealing up a certain number of organisms. 4. Swabbing the uterine cavity with tincture of iodine gave the best results. 5. Packing the uterus to control hemorrhage did not greatly increase the liability to infection. For packing, gauze saturated with 50 per cent alcohol in "clean" and plain sterile gauze in "infected" cases gave the most satisfactory results. The explanation of this is probably that in the "clean" cases the introduction of an antiseptic destroys the few bacteria which are present, but in the "infected" the antiseptic, while powerless to cope with the larger number of organisms, lessens the draining power of the gauze and probably has the same albumin-coagulating effect as the antiseptic in irrigation.

TREATMENT OF RHUG POISONING—In the J. A. M A., Robt. T. Morris tells of very speedy cure of this poisoning by the scrubbing of the affected parts with a brush and hot soap suds, followed by alcohol, as advised by Dr. Berryhill. He had used ether in the absence of alcohol with very prompt cure.

Dr. J. C. Hemmeter advises a hot alkaline bath followed by a liberal rubbing with ethereal antiseptic soap, later bathing the parts with 85% alcohol. If necessary he then uses yellow oxid of mercury ointment with orphia 2 grs. to the ounce. If itching and discharge remain, apply this ointment at night:

℞.	Bismuth Subgallate	100 minims
	Sol. Adrenalin Chlorid	v drms.
	Lanolin	i drms.
	White Petroleum ad	i drms.

A NEW AND SIMPLE METHOD OF REMOVING A RENAL CALCULUS. HOWARD A. *KELLY, Journal American Medical Association,* July 1, 1911.

Kelly says that a variety of methods should be at command in removing renal calculi. We have to vary our procedure according as the kidney is fixed or movable, the shape or size of the stone, the length of the lower rib and the stoutness of the patient, etc. A nephrolithotomy if well done is a comparatively safe procedure; otherwise it may be fatal. Kelly gives a method devised by himself, which, he says, except in the simplest cases with an easy exposure, is, as he believes, quicker and safer and better than pyelotomy or any other transrenal operation. The technic is described as follows: "A renal catheter 1.75 mm. in diameter, large enough to obturate the ureteral orifice and prevent a reflux of fluid into the bladder, is inserted through an open-air cystoscope and introduced well up to the kedney just before giving the anestheia. The patient is then put to sleep, preferably with gas, semiprone, on an Edebohls cushion. An incision is made in the loin and the superior lumbar triangle is pulled open and the kidney exposed and freed on all sides from its fatty capsule. The stone is then felt and the kidney gently loosened as far as possible on all sides and brought toward the wound. Then an assistant forces fluid (1/1,200 silver nitrate into the renal pelvis, until it puffs out tense. As a rule, with a careful preliminary study the eract capacity of the renal pelvis is already known. When the pelvis and kidney are swollen up tense the surgeon first incises the capsule and then plunges a blunt-pointed, blunt-edged knife through the cortex in the middle of a pyramid somewhat on the posterior surface, easily entering the renal at once and enlarging the incision, in a transverse direction if the stones are small. There is a gush of fluid which stops as he introduces his finger and feels for and finds the stones, which he at once grasps with a small stone forceps and re moves. The calices and the mouth of the ureter are now examined for more stones and the kidney is palpated on all sides with both hands, one finger being inside the renal pelvis. After all stones are removed the wound is plugged or held closed, while the pelvis and the calices are again distended with the silver solution, when the finger is suddenly withdrawn, letting the fluid escape with a rush, bringing any small salculus debris with it. This may be repeated several times." He emphasizes the following advantages which he thinks this method possesses: "1. It involves a minimal amount of damage to the kidney. 2. It is done through the part of the organ most easily accessible. 3. The distension is invaluable in offering a bag of fluid, overlam with a zone of soft tissue, which is easily punctured. 4. An exploration is easily conducted through the opening, revealing the presence or absence of other calculi. 5. If it is desirable to keep pit open awhile for drainage the transverse incision is a good one for this purpose, as it can be left open and will close rapidly when the irrigations are omitted. 6. In the last case in which operation was done no sutures were put into the kidney, and yet there was no escape of urine after 24 hours and practically no bleeding through the incision."

PREVENTION OF VENEREAL DISEASES—DR. POWHATAN S. SCHENK, *Health Commissioner* of Norfolk, Va., thus expresses himself on this important question as reported in *Virginia Med. Semi-Mon.*, of February 23, 1912:

"When the public finally learns through education that venereal diseases are, of all diseases, the most contagious, the most shocking and the least controlled, they will require through an accelerated public conscience that these diseases be put upon the index, subjected to the strictest surveillance, that they be reduced in their mortalities and their morbidities as have all diseases of which the public conscience has demanded regulation; and fastidious phariseeism and infantile ignorance and all effeminacy will disappear from the minds of men. Society cannot proceed upon the basis of clarifying the atmosphere of respectable diseases; as population becomes more and more dense, the uglier facts must be dealt with; must be subjected to close and searching investigation. Can any man lawfully contend that these diseases should be left to ripen, to rust, to mold, rather than be expurgated—snuffed out!"

QUININE AND UREA HYDROCHLORIDE ANESTESIA IN MINOR SURGERY—H. W. E. WALKER, M.D., of Tulane University, New Orleans, in *Med. Progress*, gives details of five cases in which he used this local anesthetic. He claims for it smallest hazard and no post-operative pain in sensitive areas. Says it should be injected *under* and not *into* the skin and sufficient time allowed (15 minutes) after injection, before beginning operation. His cases were (1) lancing abscess of jaw; (2) circumscision for phimosis; (3) hemorrhoids; (4) felon; (5) excision of epithelioma.

Miscellany

DETERMINATION OF SEX—MRS. DAVID MCCONNELL, student in Sanford University, in *Cal. Jour.*, presents a new theory on this subject drawn from her personal experience and that of her friends.

Her reasoning on the matter have led to the following conclusions:

1. The power to produce the female is vested, so to speak, not in the individual, but in the ovum. That is to say, no condition affecting the nurture of the mother herself has any power in determining the sex of the offspring, but it is determined by some condition inherent in the ovum, and common to all women at certain times.

2. That the male element has no influence in determining sex.

3. That the sex of the future child is determined at impregnation by the condition of the ovum at the time.

4. That the fullest development of the ovum produces the female after impregnation.

5. That the male is produced by impregnation either before the fullest development of the ovum, or after waste begins to take place.

6. That given normal physical conditions of health in the woman, that is to say, menstrual period recurring every twenty-eight days and continuing five days, that the ovum reaches its fullest development immediately before menstruation and continues to preserve that condition until two days after the cessation of the period.

7. If fertilization take place from one to two days before the period or from one to two days after the cessation of the period a female results, the latter method being the most successful.

8. If fertilization take place from four to eight days after the cessation of the period or from three to five days before menstruation the male results, the latter being unusual.

9. That to put the theory into practice with hope of success no possibility of conception at any other time than those mentioned must be permitted.

PRECOCIOUS PARENTAGE.—Under the above heading *Clinical Medicine* for January, on page 192, referred to two cases of early pregnancy, one in a negro girl, nine years and twenty-four days old, and one quoted after *The Lancet*, in a Chinese girl of seven. In an editorial note in *Clinical Medicine* for June, 1910, page 678, there appeared a reference to a case of pregnancy, also in a colored child nine years and twenty-four days old, which had been reported in *Clinical Medicine* for June, 1908, on page 708.

In delving among old files of *The British Medical Journal*, I came across an even more remarkable case because occurring in a Caucasian, which was first related in *The York Herald* (England) for October 19, 1881, and was reported to *The British Medical Journal*, 1904, Vol. 2, page 52. According to this account, a child eight years of age, living in Rillington, Yorkshire, England, was found pregnant in 1880 and was delivered of male child in March, 1881. This is certainly a unique case for early pregnancy in a Caucasian, and still more especially in an Anglo-Saxon, and has, with one possible exception, never been equaled so far as I am aware.

It may be of interest to review the cases which have been collected by Kisch ("Geschlechtsleben des Weibes," Berlin and Wien, 1904), whose book has recently appeared in an English translation. Kisch mentions the case reported by Molitor, delivery of a nine-year-old girl of a mole with embryo; the case of von Haller, pregnancy in the ninth year of life; *the case of Carus, pregnancy in a girl eight years old.* Casper has seen a girl in Berlin who had conceived when just twelve years old, and was delivered of a living child. Ruettel saw a nine-year-old pregnant girl. King delivered a girl who had not completed her eleventh year. Taylor reports the case of a girl twelve years and six months old whom he observed in the last month of pregnancy, and Koblanck reports that a fourteen-year-old girl was delivered of a child 4½ pounds in weight.

Except for the case of Carus, it appears, then, that the one which I have cited from *The British Medical Journal* is the most precocious one on record.—H. J. ACHARD in *Am. Jour. Clin.-Med.*

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PRESIDENTIAL ADDRESS.

C. O. Henry, M.D., Fairmont, W. Va.

(Read at Annual Meeting at Webster Springs, July 10th, 1912.)

More than a quarter of a century ago it was my privilege to join what was known at that time as the West Virginia Medical Society, and after a continuous membership you did me the honor to elect me your President, for which I am truly thankful. For me to say I had no aspirations for this, the highest office within the gift of this Association, would be uttering an untruth, and asserting at the same time that it was an empty honor; but to be elected to the presidency of the leading medical society of the state is an honor of which any doctor, however gifted, might well be proud. Having met my aspirations, it immediately dawned upon me that the responsibilities were great, and when I look over the names of those who have preceded me and who have done yeoman service for the Association, it behooved me to cast about for some topic that would interest you and at the same time be a stimulus for the upbuilding of our beloved institution.

Coming into the society at the time I did, and at a time when it was in its infancy, and having a struggle for its existence, and to see it now, after it has grown to manhood, it means much to every physician in the state who has identified himself with it, through the component societies, this Association itself being an integral part of the greatest of all organizations, the American Medical Association.

Twenty-nine years ago, and for many years following, a few valiant members would meet for two days, and discuss matters pertaining to the welfare of the profession, and to that of the state at large.

In looking around for a theme in which to introduce my subject, I thought it might not be out of place if I would be allowed to indulge in a small way some mention of the pioneers in the organization, and to many present it will no doubt bring back fond memories of dear associates gone to their reward, or retired from active work on account of the infirmities of age.

Of the number of ex-presidents since the organization, twenty-two have died and twenty-three are still living. Of the number living up to the time I became a member (1883) I find but two, Dr. W. H. Sharp of Parkersburg, W. Va., and Dr. William M. Dent of Newburg, W. Va. Of those who have died since my advent into the society, with all of whom I was personally acquainted, are Dr. B. W. Allen of Morgantown, second demonstrator of anatomy in the Medical Department of the West Virginia University, Dr. A. Gerstell of Piedmont, Dr. George Baird of Wheeling, Dr. Colley Shriver of Bethany, Dr. R. W. Hazlett of Wheeling, Dr. D. Mayer of Charleston and Dr. C. F. Ulrich of Wheeling. These were all pioneers in the work and well advanced in years. Of the ex-presidents living it is not necessary for me to mention any; many of them are

here, and all loyal, hale fellows, well-met.

We all naturally feel proud of the progress we have made in medicine and surgery in our own state. Good, wholesome laws have been enacted to safeguard the health of our people. All this denotes a good, live, progressive class of physicians, and we note in reading addresses of this character, by representatives of other State Associations, that they do not hesitate to praise the achievements of their members. If you will pardon me at this time, I would like to speak of the heroism of one of our ex-presidents, long since gone to his reward. Within my knowledge great advance has been made in surgery, due to a scientific knowledge and a careful study of the relation of organisms to various diseased conditions, and with this progress, operative skill, in many directions previously unthought of, has kept pace. The greatest in this line are operations in the abdominal cavity. Under this head the progress during the last thirty years has been remarkable. The peritoneum at one time was considered a closed book to the operators. Now all is changed, and abdominal surgery has become one of the most important branches of operative work, and hundred of surgeons at present vie with one another in their skill and rapidity in these, at one time thought, impossible operations.

Up until the advent of asepsis, the mortality in surgery was necessarily high and was the cause of opposition to operative procedure. The advance in medical and surgical science has been handicapped by the superstition and ignorance and jealousy existing, not only in the laity, but among professional men, quacks and charlatans. In 1809 when Ephraim McDowell of Kentucky performed the first operation for ovarian tumor in the United States, he was opposed to such an extent that it caused a lull in that particular line for many years. Now to the item I want to bring to your notice.

It was my privilege when a student in medicine to witness what was at that time considered the first operation for ovarian tumor in West Virginia, in the year 1877, on Indian Creek, Monongalia County, about ten miles from Morgantown, by Dr. H. W. Brock, first Demonstrator of Anatomy in the Medical Department of the West Virginia University, assisted by Dr. Schooly of Pittsburgh, Drs. L. S. Brock, Fleming Howell, and a lot of green medical students, like your humble servant. The operation was performed in a small room in a log house, surrounded by the most unsanitary conditions. The patient lived several days and did not die from shock or hemorrhage. The same hue and cry was set up throughout the State, that the operator was undertaking the impossible. I bring this case to your notice to show that we have heroes in our own state, and I do not hesitate to make this assertion, that were Dr. Brock living today, with his determination to do things, under our modern antiseptic procedure he would be in the forefront of the best surgeons in the land.

I make mention of this one instance to inspire greater zeal in our young men, who may, under our modern teaching, go forward and do greater deeds, and bring honor to themselves and credit to our State Association.

We meet in these annual gatherings for an interchange of ideas, to teach higher ideals and good, professional character, that will reflect credit to our beloved profession. I am glad to be able to tell you our association is in a good, healthy condition, and with a few corrections in our by-laws we hope to grow at a more rapid pace. The limited time of our meeting does not give all who attend a chance to take part in the papers read and discussions which follow, and no time is left for social intercourse, a thing of so much value, when we see each other but once a year.

I am indebted to our Secretary, Dr. Butt, for the following recommendation: That the Association be divided into at least two sections, Medical and Surgical, with a chairman appointed by the President for each section. This would give all who take part in either a better chance to be heard and then the discussion need not be limited.

Second. Membership in the Association should only be for those within the bounds of the county wherein they are enrolled. If a member removes from the bounds of his county society, his membership should

automatically go with him to the society within whose bounds he resides; or if that could not be done, then if he failed to transfer within the calendar year, he loses membership. We have a dope dealer, a regular outlaw, who moved to another state and retains his membership in our state.

Third. Our members have absolutely no real protection against illegal practitioners. Whatever protection the law gives is merely a bluff. The illegal practitioner is in no real danger whatever. I would recommend that our Association through the Council be allowed money from the defense fund, sufficient to push a case to the limit, and, if the state law is at fault, have it amended so as to catch these offenders.

It was my privilege to visit some of the component societies. In January I went to Keyser to the meeting of the Grant-Hampshire-Hardy-Mineral County Society, and found a very lively, up-to-date membership; also met several visiting members from Cumberland, Maryland.

The Harrison County Society entertained the State Board of Health, to which your President was invited as an honor guest, and after hearing an excellent paper from our distinguished ex-president, Dr. Wingerter, we all attended a banquet at Clarksburg's famous hostelry, "The Waldo," where the wit and wisdom flowed, beside some other things. I was unavoidably detained from making an intended visit to the Ritchie County Society. I have striven to get the best for this meeting. In a correspondence with the Secretary of the Association of Military Surgeons, Washington, D. C., he said he would like to detail a member of their staff to read a paper on Military Hygiene. At the time this paper is being written I am unable to give you his name.

While medical defense, during the past two years in which it has been operative, has had the approval of the majority of our membership, there are some defects in the by-laws governing its administration, that tend to cause friction in the component societies, and are not conducive to its general popularity. As the by-laws stand now, no member is a beneficiary of the fund unless his dues are paid on or before January 31st of ensuing year, notwithstanding that we collect and accept his dues subsequent to that time. If such are debarred from its benefits, then on the general proposition of justice and the square deal, no money should be accepted, for which, under our by-laws, no compensating benefits can be exchanged.

In component societies it frequently occurs that physicians wishing to join our societies, from our own or adjoining states, after January 31st, and get the benefits of medical defense, are deterred by this feature.

I would therefore recommend that the by-laws be revised as follows:

(1) That no member of a component society is a beneficiary of the medical defense whose dues are not paid for the ensuing year.

(2) That no member is eligible to its protection whose dues are not paid on or before April 1st for the ensuing year, and against whom malpractice suit is or has been pending after the last day of January.

(3) That new members joining the society at any time during the year may become participants in medical defense on the payment of the regular dues for that year.

It is very much desired that every member of this Association take an active part in bringing to the notice of our representatives in both branches of Congress the importance of supporting the Owen Bill for the establishment of a National Bureau of Health. Great opposition is being brought to bear against it by fake medical institutes, food dopers and patent medicine manufacturers. The same forces that caused Dr. Wiley to resign a post that he had held for 29 years are behind the opposition to this bill. It would be well for every physician and intelligent layman to acquaint themselves with the provisions of the bill, then will the public know that we have been working for a law whose provisions, if carried into effect, will place the value of the lives of American citizens above that of cattle and hogs, and I do not know that I could explain to you what the bureau will accomplish better than to quote Dr. Wiley on the present working of the Bureau of Chemistry: "One by one, I found that the activities pertaining to the Bureau of Chemistry were restricted

and various forms of manipulated food products were withdrawn from its consideration. Among these may be mentioned the manufacture of so-called whiskey from alcohol, colors and flavors; the addition to food products of benzoic acid and its salts, of sulphurous acid and its salts, of sulphate of copper, of saccharin and of alum; the manufacture of so-called wines from pomace, chemicals and colors; the selling of mouldy, fermented, decomposed and misbranded grains." This is an awful condition to obtain in a country like ours, and I hope every member will do his utmost to create sentiment in favor of the bill now pending.

There is one other item along this line, and I am sorry to have to speak about it; it is that our religious and denominational newspapers and Sunday-school periodicals teem with patent medicine and habit-forming drug advertisements.

Our marriage laws are very defective, and if we expect to build up a strong, healthy citizenship, we must have legislation that will stop the marrying of defectives, either mentally or physically. Every male and female before marrying should be compelled to show a clear bill of health before being allowed to propagate children.

"The registration of mental defectives of all grades should be followed by legislation empowering the authorities to go into homes and segregate those whom it is believed should be separated for life from their fellow-men, and who it is known will transmit their mental and physical defects to new-born children, if they are allowed to marry. This step should accompany a movement on the part of the state to determine what percentage of its criminals are feeble-minded; how many of its paupers are among this class of defectives, and trace family history of inmates of reformatories and institutions for drunkards and immoral women." It is claimed that twenty-five per cent of those in the penitentiaries and forty per cent of prostitutes are descendants of feeble-minded progenitors.

This Association ought to take a definite stand on lodge contract practice and fee splitting, and I know of nothing better on the subject than the articles collected in the January number of our STATE JOURNAL by our efficient and able editor, and would therefore commend the action of different State Societies to your careful consideration.

In the last ten years the state has made wonderful progress along different lines, but in some respects she is still behind her sister states along civic lines. In the matter of caring for the indigent blind there is no special provision for them except to beg on the streets, or spend their days in some county poor house. At a time when there were but few hospitals in the state, it occurred to the legislature that it was necessary to establish hospitals for men injured in the mines. They passed a law and established three hospitals and designated them "Miner's Hospitals, Numbers 1, 2 and 3." The hospitals were primarily for miners alone, and opposition arose on the ground that it was class legislation and hence unconstitutional. The law was amended so as to allow any person injured at his work or who needed hospital care, under the rules and regulations of the Board of Directors to be admitted for treatment. Under the last amendment the Board was given plenty of latitude, and as a result these hospitals were brought in competition with private and semi-private hospitals throughout the state. Owing to this fact it has made it a struggle for existence for private institutions within reach of the miner's hospitals. Thus it has a tendency to discourage the establishment of properly equipped hospitals on the one hand, and detrimental to the best interests of a large per cent of patients admitted to these hospitals. I base this statement on the following observations. The following case will show: A man was injured at Flemington in Taylor County, ten miles from Grafton and twelve from Clarksburg, between the hours of nine and midnight. A tourniquet was put on the leg to stop bleeding. The next morning he was put on a train, taken to Clarksburg, then transferred to the interurban line, brought to Fairmont, transferred in an ambulance to Miner's Hospital No. 3, where the leg was amputated and the patient died in forty-eight hours from shock and devitalization of the parts. We contend that had this man not been subjected to the long delay made necessary in reaching the Miner's Hospital, but taken

immediately to one of the near-by hospitals, his chances of recovery would have been greater. This is not an exceptional case, but happens frequently at these institutions.

Another objection is, the whole state is taxed to maintain these hospitals, while only small localities in their immediate vicinity are benefited.

The Grasselli Chemical Company of Clarksburg makes an annual contribution to St. Mary's Hospital for the care of their injured. The C. & O. Railroad maintain their own hospitals for their injured. The injured in the Wheeling district are cared for in the Wheeling and Glendale hospitals.

As to what is being done in the hospitals in the southern part of the state, we are not very conversant, except we know from a letter from one of the superintendents, printed in our JOURNAL, that they are doing all kinds of work, thereby coming in direct competition with physicians in that locality. Many citizens, other than the physicians, believe it wrong that the state should become a competitor with its citizens. As to the management of these hospitals we have no complaint, for we feel safe in saying, at least for No. 3, that it could not be improved upon.

There is a remedy for this. If the state wants to do the humanitarian act, let it apportion the money appropriated to the different hospitals throughout the state for the care of the injured. Then many private and semi-charitable hospitals that are losing money could live. The injured would receive immediate care. The buildings need not become a loss to the state, but could be applied to the care of the blind and other helpless citizens.

Two years ago after a campaign of education, prompted by the physicians of this Association, aided by committees from the State Board of Trade, Board of Health, Anti-tuberculosis League and fraternal orders, an appropriation of $40,000.00 was secured from the Legislature to buy a suitable site and erect buildings for a Tuberculosis Sanitarium. In order to get information direct touching on this subject I wrote on the 24th of June to the State Board of Control as to what progress they had made on the purchase of ground for suitable site and erection of buildings, and when we might expect the sanitarium to be ready to receive patients. I received a prompt reply, and as they wrote me full details I presume they desire the profession to know how far they have proceeded, hence I give you their answer as part of this paper. The letter, dated June 26th, 1912, is as follows:

"C. O. Henry, M.D., President W. Va. State Medical Ass'n, Fairmont, W. Va.

"DEAR DR. HENRY:—

"Replying to yours of the 24th, requesting information concerning the proposed State Tuberculosis Sanatorium, beg to advise as follows:

"The State Legislature of 1911 passed House Bill No. 202, an act to establish a State Tuberculosis Sanatorium, and to provide for its control and maintenance, passed February 11, 1911, in effect from passage, approved by Governor Wm. E. Glasscock, February 18, 1911, Chapter 6, West Virginia Acts for 1911. Section 2 of this chapter provides that the State Board of Control and the State Board of Health shall jointly select a suitable site for the proposed sanatorium.

"A joint meeting of these two boards was held Thursday, April 6th. At this meeting an outline of a tract of land desired as a location for the probable State Tuberculosis Sanatorium was made and mailed to all the newspapers in West Virginia, and was generally published as an item of news. The proposals of sites for the proposed sanatorium were to be submitted not later than Monday, May 29, 1911. All offers were considered on Thursday, June 3, 1911, at a joint meeting of the two boards. After considering same, a committee, consisting of James S. Lakin, John A. Sheppard and E. B. Stephenson, all of Charleston, W. Va., for the State Board of Control, and L. S. Brock, M.D., Morgantown, W. Va.; J. E. Robins, M.D., M. V. Godby, M.D., Charleston, W. Va., representing the State Board of Health, were appointed to visit the different sites offered. These two committees considered all the sites offered, and visited and thoroughly inspected the sites at or near the following points: Beckley, Alderson, Ronceverte, Marlinton, Elkins, Davis, Terra Alta, Reedsville.

"J. E. Robins, M.D., made a report for the two committees to the joint meeting of the State Board of Health and the State Board of Control, which was held in the General Reception Room in the State Capitol, Charleston, W. Va., July 31, 1911, at 2 p. m. After a general discussion of the report, a motion was made, seconded and unanimously carried, selecting the Washington Farm, situate in Portland District, Preston County, W. Va., about two miles east of Terra Alta, as a site for the proposed State Tuberculosis Sanatorium.

"The farm contains 535.78 acres. The main line of the Baltimore & Ohio Railroad runs through it. There is a station and railroad switch on the farm. Two large and never-failing streams of water, the North Branch of

Snowy Creek, the outlet of Lake Terra Alta, and the Southern Branch of Snowy Creek run through it. The land is mostly cleared, probably 100 acres in Woodland, good fertile soil, altitude at lowest point 2,653 feet, altitude at highest point 3,100 feet. Long distance telephone line and county roads run through the farm. There is plenty of fresh air, plenty of sunshine, and abundance of fresh eggs and pure milk are obtainable. Freight and passenger service are equal to any other in the State. Price paid for farm $15,000.00. This is the same farm that was selected as a site for the proposed State Tuberculosis Sanatorium by the Commission that was appointed by the Legislature of 1905, and the price paid was the same as that named in the report of 1905 Commission to the Legislature of 1907.

"The State Board of Control has had an accurate survey made of this farm, prepared abstract of title, and payment was made on November 14, 1911.

"Mr. J. H. Arnold, representative of the United States Department of Agriculture; Mr J. F. Marsh, State Superintendent of Schools Office, representing agricultural extension work; Mr. H. E. Flesher, Superintendent of the West Virginia Reform School, and James S. Lakin, President of the State Board of Control, went over the farm very carefully, taking samples of soils, and looking over the land generally, for the purpose of preparing blue prints and plans for the successful management of the farm for the use for which it is intended. A practical farmer has since been employed, who is busily engaged in gardening, general farming and otherwise cleaning up the farm.

"Plans have been prepared for Building No. 1, Receiving and Administration Building and for Building No. 2, Patients' Building.

"Contract was let to James Cain of Elkins, W. Va., May 22d, Building No. 1, $8,403.89, and Building No. 2, $4,860.00.

"On June 12th John A. Sheppard of this Board, Dr. Harriet B. Jones of Wheeling, Dr. Charles W. Halterman of Clarksburg, and H. Ruse Warne, architect, of Charleston, met the contractor, Mr. James Cain, on the State Farm, near Terra Alta, and decided on the exact location for the new buildings, and the contractor, Mr. Cain, has begun the erection of same.

"Very truly yours,
STATE BOARD OF CONTROL.
"By (signed) J. S. LAKIN,
"President."

As to when the buildings will be completed I am not able to say and the letter does not indicate when. More than eighteen months have elapsed since the project was put in force, and we are safe in saying three thousand people have died from tuberculosis in our state.

I think under the circumstances a committee of at least three from this Association should be appointed to wait on the Board and urge them to hurry the completion of the buildings for the reception of patients.

I trust if it has not already been done as recommended by my predecessor, you will amend the law so as to make the county secretaries members of the House of Delegates. The secretary is a very important factor in his county society, and if he is made a member of the House of Delegates he will have a greater interest in the State Association.

Now, in conclusion, I again want to thank you for the honor you have conferred on me, and at the same time congratulate you on having so delightful a place of meeting. I predict you will have plenty to occupy your time. Many questions will have to be discussed; possibly some rancor may arise; but let us remember that we are here to discuss questions and settle differences for the good of all. Aim to "keep sweet" and show our visiting brethren who have come long distances to tell us the advancement in medicine and surgery in their locality, how we settle questions, and go home arm in arm to do yeoman work for our beloved profession.

PROPHYLAXIS IN AURAL DISEASES AND THEIR COMPLICATIONS.

By S. MacCuen Smith, M.D.,
Philadelphia.

(Read before the West Virginia State Medical Association, at Webster Springs, W. Va., July 11, 1912.)

I accept with pleasure an invitation to discuss some of the more important means of prophylaxis in aural diseases. It is only within the last few years that systematic instruction in otology has been included in the curriculum of our medical colleges; and consequently many members of the medical profession have had little or no opportunity of acquiring an actual working knowledge of the ear and its diseases. Such knowledge is, however, of the greatest importance to all medical practitioners, in proof of which let me remind you that it is estimated that 85% of all intracranial lesions are traceable

directly to some disease of the organ of hearing. The same origin of infection is just as true of many abscess formations, by metastasis, involving the viscera of the body, more especially those complicating the lungs and liver. Furthermore, we must not forget that a great majority of these complications can be positively prevented if the primary ear disease is promptly recognized and treated.

It is encouraging to note that the day is rapidly passing when the profession or its clientele will countenance the statement that a child "has merely an earache," when in reality it suffers from a more or less severe acute otitis media; or when they will receive with confidence the remark that "it is only a running ear that the patient will outgrow." Statements of this nature are quite unworthy a learned profession, and have been, in the past, leading factors in causing the public to assume an apathetic and careless attitude in its estimation of both the acute and chronic forms of aural disease.

The character of the general illness of which the aural complication is frequently but a local manifestation will many times aid us in determining the necessity for early surgical interference. If, therefore, the organ of hearing becomes involved during an attack of one of the exanthemata, epidemic influenza, or pneumonia, the ear should be examined frequently and treated energetically. This is of prime importance in the case of children, especially infants, so many of whom have died from meningitis or other complications while the underlying cause of their illness had been entirely overlooked.

For a better understanding of the pathologic changes occurring in aural disease, it is well that I should recall to your minds a few important anatomical points. You remember that the mucosa covering the naso-pharynx acts also as a mucous lining for the Eustachian tube and middle-ear cavity, and being greatly modified, forms the internal layer of the membrana tympani. It also covers the ossicles, and finally serves as the protective covering of the mastoid antrum and cells. Because of this intimate mucosal relationship, we can readily appreciate how easily, by continuity, an inflammatory process of the throat or nasopharynx can involve the middle ear and adjacent structures by way of the Eustachian tube. The same is true, in a less degree of the auditory canal, with the exception that this is covered with a skin reflected from the auricle and eventually forms the external layer of the membrana tympani. The notably thin bony framework of the middle-ear cavity is surrounded by some of the most vital structures in the human economy. The roof of this cavity, always thin, is in some instances entirely absent, particularly in young children and infants. The carotid canal, through which passes the carotid artery, forms the anterior wall; the jugular fossa, in which lies the bulb of the jugular vein, constitutes the floor, while the roof is formed by the floor of the middle fossa of the skull, on which rests the temporo-sphenoidal lobe of the cerebellum. Above and behind the oval window, on the internal wall, is situated the Fallopian canal, which contains the tympanic branch of the facial nerve. The bony wall separating the lateral sinus from the mastoid cells is also thin to the point of translucency.

The foregoing facts make it apparent with what facility the meninges may be implicated through the roof, or the jugular vein through a deficiency or carious erosion of the floor. The labyrinth, or nervous part of the organ of hearing, may likewise be involved by erosion through the internal tympanic wall. Then, again, note how easily Bell's palsy may be caused by injury to or disease of the tympanic branch of the facial nerve, as may also a greater or less disturbance of the equilibrium should the middle-ear disease extend to the semicircular canals.

While the tympanic cavity and the mastoid antrum and lower cells are spoken of as distinct and separate cavities, the latter are, in reality, accessory to the former, being connected by a comparatively narrow space. Herein is offered an explanation of the usual involvement of the mastoid process, to a greater or less extent, in practically all acute inflammatory diseases of the middle ear. The relationship of the nasopharynx, the Eustachian tube and the tympanic cavity to the mastoid cells is thus seen to be of the greatest importance

as a causative factor in acute mastoiditis. Indeed, with the exception of trauma, practically all diseases of the mastoid are really an extension of an infection from the nasopharynx. The nature and activity of the mastoid disease, as well as the rapid destruction of the osseous structure caused by it, are governed largely by the character of the primary lesion in the nasopharynx.

In gauging the severity of an aural lesion by the discharge, the value of a bacteriological examination by cultures and the microscope cannot be overestimated. It is true of aural discharge, as of the lochia following labor, that sometimes the most virulent infections will be entirely odorless. On the other hand, although more rarely, a less dangerous discharge will have considerable fetor.

It will be seen from the foregoing that the method of infecting the middle ear and adjacent parts is either by direct continuity of structure, the organisms entering the tympanum through the Eustachian tube, or they are conveyed by means of the blood vessels and lymphatics.

For obvious reasons it is utterly impossible to arbitrarily dictate a definite classification of the various acute tympanic lesions, for since the vast majority of all aural lesions originate in the manner above described as a simple catarrhal otitis media, this must be considered as the first or primary stage of an acute suppurative otitis media, it being impossible, in a majority of instances, to state where the acute catarrhal form ends and the acute suppurative begins. Practically all ear diseases, therefore, have their origin in an acute catarrhal otitis media, and this in many instances rapidly assumes the acute suppurative form, and by extension, either by continuity, or through the blood vessels or lymphatics, involves the mastoid antrum and cells on the one hand, or may give rise to an infectious meningitis or infectious sinus thrombosis on the other. Furthermore, if the case progresses to a chronic suppurative otitis media, which is simply an advanced stage of the acute purulent form, this latter condition may, as you are all well aware, continue for months or even a number of years, without causing any inconvenience except the annoyance of a "running ear." Eventually, however, one of several conditions is almost sure to develop, the most common of which is a chronic mastoiditis, which may continue indefinitely without producing symptoms. Then, again, through carious erosion of the mastoid process or the floor of the tympanic cavity, the sinus may be involved in an infectious thrombosis; or likewise through carious erosion of the tegmen antri or tegmen tympani, or by means of the blood vessels or lymphatics, an intracranial abscess formation is very likely to develop.

It will be seen, therefore, that our most important, and at the same time efficient, prophylactic measure, not only in the treatment of acute aural disease but with a view of preventing its serious complications, is, in the first place, an early recognition of the primary lesion, to be followed by a free incision and efficient evacuation of the tympanic secretion.

The classical indications for incising the membrana tympani are in some cases as unreliable and misleading as are the classical rules for operating on the mastoid or the abdominal appendix. Generally speaking, it is well to wait until some bulging of the membrana tympani occurs, but a grave error will have been committed if we wait for this symptom to become prominent in ear diseases complicating the exanthemata, epidemic influenza, pneumonia, or other virulent infections. As these cases are usually purulent from their inception, an early incision of the drum membrane is the important factor, even though bulging has not occurred. This is especially true if the pain is severe and not influenced by blood-letting and the employment of other measures for relief. Should the suffering continue for some time after thorough evacuation of the pus, and an examination show the presence of the more virulent micro-organisms in any considerable number, the patient's future health, as well as conservative surgery, will be best served by an immediate opening of the mastoid, even in the absence of more pronounced mastoid symptoms. Timidity or delay in this particular type of cases is especially prone to favor the development of some intracranial lesion. The incision of the drumhead or opening of the mastoid

process, under such circumstances, is positively imperative. The gravity of the procedure, if, indeed, it can in any sense be termed serious, is nothing as compared with the possibility, or even probability, of the grave intracranial complications likely to follow as a result of procrastination.

This free evacuation of pus from the tympanic cavity, however, can never be accomplished by a simple puncture of the membrana tympani. The membrane must be freely incised, the chief requisite being to carry the incision from the most bulging point downward to the lower border of the canal, said incision to be continued either in an anterior or posterior direction, until about one-sixth part of a circle has been formed. This will not only provide for good drainage, but will insure the opening remaining patulous long enough to admit of proper after-treatment.

There are two principal reasons why so many cases of suppurative otitis media do not yield to treatment in the initial stage. In the first place, if the membrana tympani ruptures spontaneously, the opening thus formed is usually situated in the superior part of the membrane (Shrapnell's), which only allows the pus to escape by the process of overflow; furthermore, pressure sufficient to produce rupture frequently causes maceration and peeling off of the tympanic mucosa, as a result of pressure necrosis. The osseous wall, being thus denuded of its protective coat and natural means of resistance, is exposed to the ravages of the various pathogenic microorganisms. This frequently is our starting point, by means of carious erosion, for the various intracranial and labyrinthine complications. Autoinfection thus occurs on account of the cavity being constantly filled with pus up to the level of the perforation. Again, the edges of the ruptured membrane are irregular, consequently they do not coaptate readily nor unite kindly, whereas a clean incision will always repair with the greatest facility. Furthermore, if only a puncture of the membrane is made, the opening is too small to provide for adequate drainage, even though it is properly situated. The logical measure, therefore, to be employed in the evacuation of pus from the tympanic cavity, which, in turn, is our best means of avoiding mastoid and intracranial complications, is, as above stated, an early and free incision of the membrana tympani, but never the folly of simple puncture. The practice of so-called paracentesis is unsurgical in so far as it relates to otology, and that the future may be free from the inefficient treatment this procedure has engendered in the past, the word should be dropped from aural literature.

Following a free incision, aspiration of the tympanic cavity should be performed, which will relieve the congested mucosa of considerable blood and thoroughly evacuate the pent-up secretion.

During the course of, or convalescence from, an attack of acute purulent otitis media, the patient may suddenly experience deep-seated pain in the region of the mastoid process. The aural discharge, which has perhaps been gradually decreasing in quantity, may follow one of several courses, showing that recovery has been interrupted; it may suddenly cease, this abrupt cessation being accompanied by no amelioration of the patient's condition, and being followed in a few hours or a few days by a still more copious flow of pus; or the discharge may gradually increase in volume until it is necessary, on purely physical grounds, to assume the involvement of the accessory sinuses in order to explain the quantity of pus excreted during the twenty-four hours, or the long continuance of the discharge may warrant the inference of a necrotic focus more deeply seated than within the small tympanic cavity.

Notwithstanding the fact that the vast majority of all aural complications are preventable and our means of effective prophylaxis are so simple, nevertheless carelessness or neglect in this respect is still very prevalent; on the other hand, much interest is manifested, indeed, we are bending our every effort to amelioration or cure after these grave complications have developed. I may be pardoned, therefore, and am willing even to run the risk of being considered mercenary, for forcibly calling the attention of practitioners of general medicine to this grave question, for in the very nature of things, these cases primarily come under the care of the attending physician, who should be impressed with a realization of their gravity, and either as-

sume the responsibility of treating the primary lesion himself or have it cared for by an aurist.

With a view that aural prophylaxis may have the efficiency its importance demands, I again wish to make a plea for a more routine examination of the ear in many general illnesses, more especially in the exanthemata, influenza, pneumonia and typhoid fever. No doubt many of my hearers have had the experience of a typhoid case improving up to the point of advanced convalescence, in which the diet has been increased, when suddenly a rise of temperature indicates a "relapse," the assumption being that substantial feeding has been instituted too early. Accordingly, the patient is again placed on restricted diet, the ear not being suspected until after the lapse of several hours or days, when the discoloration of the pillow caused by a discharging ear reveals the true cause of the apparent "relapse." This is mentioned simply to illustrate the importance of a more routine examination of the organ of hearing.

In the foregoing I have endeavored to show that aural prophylaxis is truly preventive of many of the serious complications, but in order to be efficient, the case must be seen early and treated energetically. By so doing, the disease can, in most instances, be confined to the tympanic cavity.

Discussion: Dr. Johnson said that in ear diseases one should not neglect to look for adenoids Chronic mastoiditis may produce a general toxemia in which there may be no pain, or only slight pain at intervals, and but slight or intermittent discharge from the meatus. There may be a little elevation of temperature, and one may mistake the condition for typhoid fever.

Dr. Ogden said these obscure cases, where we are unable to make out a diagnosis, concern us most. We should realize that mastoiditis is a very common disease. The ear drum should be opened early with a free incision, as pointed out by the essayist. This paper means much to the general practitioner.

Dr. Bloss said that ear affections may even result in insanity. He mentioned a case of acute mania, coming under his observation. After middle ear disease was discovered and properly treated the mania disappeared.

Dr. Link said these chronic ear troubles often go around for a long time unnoticed, and then break out suddenly and rapidly become dangerous.

Dr. Jepson mentioned a case of a man of 50, who had pneumonia in May, 1911, and again in January, 1912, in same upper lobe Both attacks extremely severe. After the temperature became normal in last attack, an uneasy sensation, but no positive pain, was felt in right ear, and a discharge quickly appeared. There was no rise of temperature, and no tenderness over mastoid, except slight on hard percussion. The tissues below the ear because swollen and pain over occiput set in. After five or six days about two degrees of fever appeared, when a surgeon was called who promptly opened the mastoid, and the patient made a prompt and perfect recovery. Attention was called to the fact that serious discase of the middle ear may exist without either fever or pain.

Dr. Powell reported a case of ear disease in which there was no occipital pain, no discharge, no tenderness, in fact no symptoms attracting attention to the aural region, and yet he died with a discharge from both nose and throat: another case in which occipital pain was very great, where patient died with a discharge from the ear and nose; a third case in which there was occipital pain.

Dr. Halterman said it is important that we give early attention to these cases not only in order to preserve hearing but also life. Many a backward child in school owes its tardiness of mental development to partial deafness due to an undiscovered ear disease. If the hearing is lost in infancy the speech faculty remains undeveloped, and deaf-mutism results.

Dr. Smith (closing) said he has been often asked if it is wise for a general practitioner to undertake to open the tympanic membrane. He thinks he should by all means learn to do this. This he regards as the most important point in his paper. We were slow to learn the importance of early operation in appendicitis, slow to appreciate the potency of this disease as a cause of peritonitis. The same is the case with middle ear inflammation, and its relation to mastoid disease, meningitis, brain abscess, etc. The membrane must be opened as soon as pus is present. The mastoid must be opened promptly. Delay is dangerous. The favorable cases are those where there is external swelling around the ear, indicating that the inflammation is external. Do the mastoid when you have a chronic discharge even if no active symptoms be present. Agrees with Dr. Bloss that insanity may result in these ear cases. The people should be educated to understand the necessity of surgical interference even in the absence of active symptoms. Told of a case in point. A man who had an ear discharge for 40 years suddenly developed a brain abscess. An operation resulted in recovery.

It is important also to consider the loss of hearing that is apt to follow neglect to promptly evacuate pus. Deafness in early life may also result in lack of speech, since the child learns to speak by imitation. Advises anesthesia always in opening the membrane.

ETIOLOGY, PATHOLOGY AND TREATMENT OF RHEUMATISM AND ALLIED CONDITIONS.

W. J. Judy, M.D., Webster Springs, W. Va.

(Read at Annual Meeting State Medical Ass'n, July 10th, 1912.)

In offering this paper to this association and the medical profession at large, I hope to elicit a free discussion and to stimulate scientific research along new lines, with the hope of finding out the primary and essential cause of the various destructive and extensive pathological conditions which are termed acute rheumatic fever, and the allied conditions such as chronic rheumatism, muscular rheumatism, arthritis deformans and gout; and I also add asthma, chorea and eczema on account of their frequent association with these diseases. If I succeed in doing this I shall feel well paid for my labor. We shall treat these various diseases as an auto-intoxication, which for the want of a better term we will christen "rheumatic toxaemia," which has its primary origin in the alimentary canal, either as a bacterial infection or faulty digestion. Secondarily, infection is carried into the blood in that form of toxaemia known as acute rheumatic fever, or developed in intermediary purin metabolism.

Etiology.—We shall now review briefly the various theories which are in a measure accepted as causes of these diseases, most of which are mentioned only to be condemned. Acute rheumatic fever is said to be due to exposure to cold and damp weather, heredity, age (most frequent from twenty to twenty-five years), previous attacks (one attack predisposes to another), excessive amount of uric acid; bacterial, the finding of a micro-organism, termed *diplococcus rheumatics*, in the exudates and the vegetations of valvular lesions.

Chronic Rheumatism.—Hare says the cause is unknown, and then goes on to say, it is seen in advanced age, and in those exposed to cold and wet.

Muscular Rheumatism.—A disease of adult life, one attack predisposes to another, cold and damp weather, gout increases the tendency to attacks. Hare well says that "the exact cause of muscular rheumatism is not well understood." He advances the idea that the liquids of the body contain a large amount of toxic materials produced by perverted metabolism, and when exposed to cold there results precipitation of these toxic materials giving rise to pain and stiffness.

Gout.—Heredity, age, sex, diet consisting of a large amount of proteid and excesses of wine and malt liquors, combined with sedentary habits of life. Hare well says again about this disease, "the precise cause is unknown."

Arthritis Deformans.—Bad hygiene, exposure, prolonged lactations, frequent pregnancies, grief, also follows attacks of acute articular rheumatism. Some authors believe it to be an infectious disease; age. All the cases I have seen except one began in childhood, ranging from ten to fifteen years, although some text books say it is a disease of middle life.

Chorea, Asthma, and Eczema.—I will pass these maladies by, stating that the rheumatic toxaemia is not responsible for all forms of these diseases, as we often see the two former due to renal insufficiency and various other factors, in the latter the addition of external agencies; but I maintain that the rheumatic toxins are responsible for the great majority of these cases, notwithstanding the many other admissible factors. By closely observing the etiological factors of the above diseases we find many common to all, especially as regards heredity and change of climate. We might ask, is it not time we should stop laying so many of our infirmities at the feet of our ancestors, and to the state and condition of the weather, and be willing to assume the burden thrust upon us by our own transgression, in violating the laws of health by our excessive eating, drinking, working and worrying. We are forced to admit that exposure to cold and dampness appears to act as a common exciting cause in precipitating many attacks of these maladies, but if such were a potent factor the rheumatic or gouty patient would have an attack every time he was exposed to inclement weather. This we

know is not the fact. Further, I cannot see how exposure to cold would cause a precipitation of the toxin or salts in the joints, as the body temperature remains the same under all conditions of atmospheric humidity and changes in temperature. We will endeavor to account for this condition in the following manner. The skin being one of the great avenues of elimination of poisons from the body, has its function slightly or almost wholly put in abeyance by exposure to low temperature and highly humid atmosphere, thereby causing an accumulation of rheumatic toxins in the blood and thereby enhancing their action. I believe the fundamental cause of the rheumatic toxaemia is over-eating, especially of nitrogenous food. The average American in the better classes of life eats entirely too much, I should say possibly one-half to two-thirds more than is necessary for the proper nutrition of the body. The question is not how much a person can eat and keep well, but how little he can eat and retain his normal, mental and physical powers. In support of my statement as to the cause of rheumatic toxaemia, I ask your indulgence to follow me closely. We will state briefly, what is the result of eating more than is digested, or more than the body demands. As it is a fourfold expenditure of vital energy in eating, digesting, assimilating and eliminating, thus weakening the body, lowering its vitality, thereby rendering it more susceptible to disease. To prove to you what great amount of energy is required in the digestion and elimination of food, I will give you a simple illustration. Suppose you take a lead or iron ball in the palm of your hand, weighing say one pound, and under compulsion be made to move, rotate and revolve this ball in all directions for two or three hours, without any intermission; I simply ask you to try it. Yet we require many times this amount of energy of our digestive and eliminative organs. The stomach, for instance, must revolve a mass of food weighing several pounds from two to four hours, requiring a great amount of energy. This is only a simple fraction of energy compared to the vast amount expended in passing the food through many yards of intestines, and by the heart and circulatory apparatus, and finally the eliminative organs. Many of us no doubt are familiar with the cases of sudden death from indigestion in those who have previously been in good health. The laborer working hard all day in the mines or mills, exhausts so much of his vital energy, comes home at night, partakes of a meal composed of pork, boiled cabbage, onions, pickles and various other foods aggregating several pounds; he then retires, goes to sleep and never wakes. We come along next day, make out a certificate of death due to indigestion or heart failure, when in fact the man's store of vital energy is exhausted from the previous day's work, and in endeavoring to digest the hearty meal, his battery exhausted, death results. The continuous ingestion of an amount of food in excess of motor and secretory functions of the alimentary canal gives rise to various gastro-intestinal disturbances.

We will now see what becomes of this excess amount of food which must remain undigested in the alimentary canal on account of the conditions above enumerated. It must naturally undergo decomposition, fermentation and putrefaction. We have an ideal place for the development of bacteria which are present even in health in the digestive canal in great numbers; from 40 to 50 different varieties are now known, besides many varieties which have not been discovered. We are only in the beginning of the study of the bacteriology of the contents of the intestinal canal and their pathological importance in their relation to many diseases, one observer having recently claimed that one kind of bacterium in the intestines was the cause of senility. Many of these bacteria under normal conditions are non-pathogenic, but according to Dr. Julius Mannaberg become pathogenic under the following conditions: *First*, increase in virulence; *second*, excessive multiplication; and *third*, a migration into the lymph and blood channels as above stated. We have an ideal place for excessive multiplication, a temperature of 98 6-10, moisture and abundant pabulum in the excess amount of proteids which are undigested. The proteids appear to be a favorite medium for the growth and multiplication of the species of bacteria which gives rise

to the rheumatic toxins. The rapid multiplication of the bacteria increases their virulence, causing gastro-enteritis. thereby giving a favorable condition for the bacteria to pass through the walls of the intestines into the lymph or blood channels, together with the toxins, when they are readily carried to all parts of the body where the toxins produce their virulent and widespread effects upon many organs and tissues of the body, such as the heart and blood vessels, white fibrous cartilage, kidneys, nervous system, skin and many other tissues too numerous to mention here. Many physicians and authors have noted the dilated stomach in arthritis deformans. I venture the assertion that every physician here who has taken a careful history of his rheumatic or gouty patient has found a history of previous attacks of indigestion or dyspepsia or their association at the same time, or one or more of the various manifestations of the rheumatic toxins will be associated with the other. I offer the following reasons for the frequency of this disease during the fall and winter months: the humidity of the atmosphere and the low temperature decreasing the skin function, thereby decreasing the elimination of the toxins, and in addition the increased consumption of meats, especially pork.

The various investigators up to the present time who have made a study of the bacteria found in the rheumatic lesions have been unable to verify their discoveries, by Koch's "fundamental laws."

Pathology. — The pathological lesions produced by the rheumatic toxins are wide spread and destructive in their effects, varying in intensity from an acute infection which may terminate in death in a short time, to a milder and chronic form lasting for years with various exacerbations and intermissions. We are all familiar with the lesions produced by the toxins of diphtheria on various organs and tissues of the body, and are willing to accept it at its face value without a question. We know how these toxins have a selective action on the nerves and heart. We know not why; in the same manner we are reluctant, though compelled to admit this same selective action of the rheumatic toxins on the white fibrous tissue throughout the body, as is demonstrated in the arthritis of various grades, the arteriosclerosis, the endo-carditis and inflammation of various serous membranes. We note their effect on the organs of elimination as is demonstrated by the frequency of the contracted kidney associated with or developing after a period of longer or shorter duration of the rheumatic toxaemia. The lungs, being one of the great channels by which the body rids itself of poisons, assist in the elimination of these poisons, and as a result we have an attack of asthma. The skin, in playing its role in eliminating this poison, is affected with various eruptions and eczema. The effects of the toxins on the nervous system give rise to various grades of nervous symptoms, varying from peevishness and irritableness to all the serious and grave symptoms of the major form of chorea.

Time and space forbid me entering into details on all the minor or even the major lesions of these various diseases, but if you will bear with me awhile I will deal with the most frequent and serious pathological lesion of this group of diseases, i. e., the heart lesions, and especially the valvular affections. As above stated this toxin or these toxins have a select action on the white fibrous tissue, as the center of each valve leaflet is composed of this tissue which is affected in the following manner: It becomes swollen from a cell proliferation, giving rise to a thickening of the valve leaflet, thus causing it, in the act of closing, to come in contact with the other leaflets before the act of closing is completed, causing a friction. This friction site becomes abraded and thereby acts as a favorite site for vegetation or adhesions, giving rise subsequently to contraction (which is a property of all new formed tissue) of the valve, causing respectively the obstructive and regurgitant heart murmurs. In concluding this part of my subject I would like to ask the members of the profession and the authors of text books, are not the various lesions in acute rheumatic fever, gout and arthritis deformans one of degree only?

Treatment.—The scientific and successful treatment of these as well as all other diseases can only be accomplished when we

know the cause, and are able to remove it. The "specifics" for this class or group of diseases come and go as the decades or centuries roll by, changing almost as frequently as the style of women's apparel. I ask what is the cause of all this? We do not know the cause of these diseases, and as long as this state of affairs continues, so long will our therapeutic measures remain empirical and continue to change. Assuming that the toxins of this disease originate in the gastro-intestinal tract or from intermediary purin metabolism, or both, and that both are due to an excessive proteid diet far beyond what is necessary to maintain a normal nitrogen balance, it naturally follows that the sane and logical mode of treatment is preventive, which to my mind is the most important line of treatment in any disease.

Permit me to say that I hope the day is not far distant when the hygienist will relegate the therapeutist to the background in medical science. The question then naturally arises, what is the normal amount of proteid diet required to maintain a normal nitrogenous equilibrium? This question admits of many answers. Among the factors which determine this fact we include age, occupation, the ability to maintain a nitrogenous equilibrium on a vegetable diet, and last but not least the "idiosyncrasy" of certain individuals for this class of food. I remember having read a case a few years since which was reported in the *Medical World*, of a patient who could not take the white of an egg even in the smallest amount without giving rise to serious toxic symptoms. In this instance we find the truth of the old adage, "one man's food is another man's poison." Therefore, the regulations of the diet of these patients is of the first and paramount importance, and one of the most difficult tasks in the treatment of this class of patients in private practice. But as it is impossible for us to apply the preventive treatment in all cases, we must resort to other means and measures directed toward the relief of the patient who is in the midst of an attack of acute rheumatic fever or gout.

As in all toxic conditions measures should be directed toward the removal of the cause and the elimination of the toxins. The first object should be accomplished by gastro-intestinal antisepsis and measures directed toward the relief of any pathological conditions of the alimentary canal; and the second by stimulating the various emunctories to increased action. We are handicapped in the first object in not having at our command any drug or known means by which we can satisfactorily accomplish the desired result. The only means of securing anything like intestinal antisepsis is to thoroughly empty the gastro-intestinal canal with calomel, giving ½ gram doses every ten minutes until five or ten grains are taken, following the last dose in six hours with a large saline purgative. We accomplish a two-fold object in this procedure in the elimination of bacteria and toxins and intestinal antisepsis, as I consider calomel the best intestinal antiseptic at our command at the present date. The kidneys should be stimulated with alkaline diuretics and the skin with diaphoretics, by hot pack or Turkish bath. The drinking of an abundance of pure water acts both as a diuretic and diaphoretic, thereby assisting in the elimination of the toxins. A stay at some of the various mineral springs where the habits of the patient are regular and he can be induced to drink an abundance of water and take the baths regularly and frequently, will do much toward curing or eliminating the toxins for the time being.

The Diet.—All foods excessively rich in proteids should be prohibited for at least two weeks, when they should be resumed sparingly and cautiously.

Any gastro-intestinal disorder, such as gastritis, hyperacidity, constipation and all other similar diseases should receive careful and proper treatment.

The intense pain is at times almost unbearable, in those suffering from an acute attack of rheumatic fever. The patient repels any attempt at handling his limbs, as I well know from the school of experience, having been a sufferer from rheumatic toxemia for many years, having had many acute attacks rendering me almost helpless as an infant for weeks at a time. For the immediate relief of this pitiable condition we must still resort to the old time-honored remedy, sodium salicylate. I find from experience in my own case that this drug

when made from pure oil of wintergreen is more effective in its action and better tolerated by the stomach.

I find aspirin equal to, if not superior to sodium salicylate in the relief of pain and amelioration of symptoms and the cutting short of an attack. I nearly always use these drugs jointly, administering them with a free hand, giving as much as ten or fifteen grains of sodium salicylate and five to ten grains of aspirin every two hours, alternately.

Local Treatment.—Oil of wintergreen or hot fomentations over the affected joints may be attended with benefit.

Insist on absolute rest in bed until all acute symptoms subside, and when the heart is affected until the murmurs disappear, even though it is many weeks or months.

MEDICAL LEGISLATION IN WEST VIRGINIA.

G. D. Lind, M.D., Greenwood, W. Va.

(Read at Annual Meeting State Medical Ass'n, July 10th, 1912.)

A recent number of a medical journal, which has a shady reputation for upholding quackery, intimates that, perhaps, we already have too much legislation on medical subjects, that too much activity on the part of the regular professions along this line will only increase the reputation which the editor thinks the profession already has as a medical trust. The editor of said journal, which I will not name, as I do not wish to advertise him, should remember that previous to 1880, not much more than thirty years ago, we had very little legislation regulating the practice of medicine or guarding the public health, and that what we have achieved has been solely through activity and organization of the regular medical profession.

I will admit readily that we may have too many laws, but we can not have too many good ones. Laws are bad, when they are bad, in two ways. First, the law may be for a purpose which should not require a law, and second, the law may be for a good purpose, but so badly worded that it can not be enforced, being capable of two or more interpretations. Such laws may do more harm than good for they tend to create distrust and contempt for all law.

I will also admit that law in itself can avail but little. There must be public sentiment back of it. But how are we to produce a public sentiment? Only by agitating the subject of which the law is merely the formal expression. There is only one way to agitate a question and that is by organization.

Who accuses the medical profession of being a trust? Only those whom laws have affected. Have we any law in any state or in the United States, which prohibits a man from practicing medicine according to his own notion? Our laws make an attempt to better the profession by protecting the people from ignorance and cupidity. If a young man starts out in life for the purpose of making money and cares not how he makes it, that man is a failure as a man and as citizen. It does not take a wise man to see that the practice of medicine, to be of benefit to the people at large, must be founded on honesty and uprightness as well as a thorough knowledge of the human body. The man who is not honest and tries to become a physician without a thorough training in the fundamental branches which must lie at the bottom of successful healing, in other words, who tries to climb up in some other way, the same is a thief and a robber and the law justly should take hold of him.

The State of West Virginia requires that a man must have a knowledge of physiology, chemistry, anatomy, pathology, obstetrics, surgery, bacteriology, sciences upon which any system of medicine must be based or it can not be successful except perhaps in fleecing an innocent public. Was this law made for the benefit of the doctors, even admitting that it was made through the agency of doctors? No, it was made to protect the people from the ignorant would-be doctor. Incidentally it helps the regular profession by keeping out the competition of this dishonest ignorant class, but even then to no great extent for the majority of people recognize true merit and patronize the man who is prepared to do his work properly and who will do it honestly.

West Virginia has laws establishing quarantine and other measures for the pre-

vention of disease. Does this benefit the regular physician? Certainly not, for it is destroying his own business. But who recommended and who enforce these laws? The regular physicians and those who are licensed by the state to practice. Did you ever hear of a quack advocating a law to help his business? The quack wants only to be let alone, and so does the thief and the robber.

We ask that the law of West Virginia be amended so as to clear up the definition of the practice of medicine. In Ritchie County there are five men now practicing medicine, none of whom have complied with the law regulating practice. They have not been examined nor licensed by the State Board of Health. One was prosecuted and not found guilty of violating any law on the grounds that he used no drugs.

The law reads thus: "Any person shall be regarded as practicing medicine, within the meaning of this chapter, who shall profess publicly to be a physician, *and* to prescribe for the sick or who shall append to his name the letters 'M.D.'" The term "prescribe" is not defined by the lawmaker. Webster defines "prescribe" as used in medicine as follows: "To write or give medical directions: to indicate remedies; as to prescribe for a patient in a fever." The inference is that one must give, or direct to be given, some drug, although it does not say so. Many remedies are used by regular physicians which are not drugs. The common understanding of the word is that it means to give or cause to be given a drug of some kind. This man did not use drugs, he manipulated his patients, therefore the court decided that he did not come within the meaning of the chapter of the West Virginia code. Such is the supposed dignified thing we call law. But there is still another loophole in the definition. I have called attention to it several times before. Notice that it says one must profess publicly to be a physician *and* prescribe for the sick. He can do one or the other and not violate the law, but if he does both, woe be unto him, for he hath maliciously and with forethought violated one of the statutes of the great commonwealth of West Virginia and he is guilty of a misdemeanor and may be fined "for every such offense, not less than 50 nor more than 100 dollars, or imprisoned in the county jail not less than one month nor more than 12 months, or be punished by both such fine and imprisonment, at the discretion of the court."

The law is not enforced. The penalty is not commensurate with the crime. The itinerant doctor does not fare quite so well. The statute reads: "Any itinerant physician desiring to practice medicine in this state, or any itinerant vendor of any drug, nostrum, ointment, or appliance of any kind, intended for the treatment of disease or injuries; or who shall by writing or printing, or in any other method, publicly profess to cure or treat diseases, injuries or deformities by any drug, nostrum, manipulation or other expedient, shall before doing so, pay to the sheriff of every county in which he desires to practice, a special tax of $50.00 for each month or fraction of a month he shall so practice in such county." Here we have the practice of medicine defined clearly, but that word itinerant spoils the whole batch, for only those vendors and prescribers of nostrums who move from place to place are affected. This law seems to have been made to protect the druggist and dealer in general merchandise, who are constantly prescribing for the sick and who do not profess publicly (nor privately) to be physicians, nor travel from place to place.

The fact of the matter is simply this: The law is a dead letter and can not be enforced. We may just as well have none at all. There is a "joker" in it which lets the quack out on the winning side.

But West Virginia is not the only state in the world which has illy defined laws which are no laws at all. I have just been reading a letter in the *Jour. American Med. Assoc.* from their regular correspondent in Vienna. He says: "As no valid law in this country strictly defines the meaning of medical practice, thus giving free reign to quackery in a high degree, the Union of Medical Councils has adopted the following definition, which is being suggested to the government as covering the problem and which will appear in the 'Health Act' now in consideration: 'Medical practice in the meaning of the law is every act which requires the possession of a medical diploma

of doctor of medicine. It comprises not only the art of healing, i. e. the application of the results of medical science on the human body by a doctor of medicine, but also all the doings of a medical expert, the prophylactic actions of medical men for the purpose of prevention of disease, the teaching of medical science, the opening and embalming of dead bodies, the experiments of bacteriologic chemistry and on living bodies as well as vivisection and animal experimentation for the purpose of ascertaining a diagnosis, and the writing of medical books.' "

What this old nation will do with this remains to be seen, but we earnestly hope that the comparatively new nation of West Virginia will take a hint and act accordingly.

But not only does the law need revision, it needs additions. If, as Dr. Jacobi says, half of the births in the United States (86 per cent in Chicago) are attended by midwives, is it not exceedingly desirable that midwives be educated for the work? Foreign countries educate and license midwives. Dr. Jacobi thinks they should be taught at least five years, viz: (1) The care of expectant women; (2) the conduct of normal labor; (3) care of babies immediately after birth; (4) the simple principles in an urgent case of artificial feeding, and (5) the diagnosis of abnormalities to the extent of knowing when to call in medical skill. Says Jacobi: "Let no legislature of any state pass without a bill or law to safeguard the newcomers and their mothers."

The State Board of Health is appointed by the Governor, thereby making that body come within the influences of politics. Some other method of selecting that board could be devised. North Carolina's board is appointed by the State Medical Society. This method is open to the objection that so-called schools of medicine are not considered. A law requiring the governor to select the board from a number recommended by the State Medical Association, as is the case in some states, would be better.

West Virginia made one advance when she required a college diploma as a prerequisite to admission to examination. She should now make another step forward and require that the diploma should be from a college with a high standard, one having no less than four years course.

A law prohibiting marriages of persons so physically and mentally afflicted as would entail disease of offspring should be enacted. A law requiring all persons to be examined by a board of competent physicians and given a clean bill of health before given license to marry would be of vast importance, much more than many of the laws on our statute books. For example, West Virginia has a law prohibiting a man from working on Sunday, from profane swearing and from getting drunk, all of which injures the man himself more than they injure his fellowmen.

As I write this, newspapers give the report that the Probate Judges of Kansas will hereafter demand certificates of health from persons seeking marriage licenses and that they have incorporated these requirements in a bill which will be introduced into the Legislature of Kansas at the next session. A report also comes from Cleveland that the Federated Churches of that city will urge similar legislation in Ohio. In Illinois there is also a movement toward this end led by Dean Sumner of St. Paul's Cathedral. Let not West Virginia be among the last to enact such a law.

But talking about the necessity of law and the method of getting it are two different propositions. If every physician in West Virginia would take the trouble to write two letters in the month of December, 1912, we could have the best medical legislation of any state in the Union before a year has elapsed. These letters need not be of many words. They should be directed one to the member of the House of Delegates and the other to the State Senators who are to be elected in November. They need only call attention to the necessity of revising the laws of the state pertaining to the practice of medicine.

Our committee on public policy and legislation should, with the aid of a lawyer, frame a bill and see that some member of the legislature shall introduce it early in the session. Then we will bombard the members and prevail on our friends to do the same.

Discussion: Dr. Judy thinks that before a law is decided upon we should secure the co-operation of the pharmacists, the State Board of

Health, and the State Board of Control, and that we should also agitate the question in the churches and Sunday schools, to the end that the people may be educated to see the necessity of such laws.

Dr. Wingerter agreed with Dr. Judy and thinks that public sentiment should be aroused. Doctors are often to be censured for their want of interest in these matters. They should have more influence with prosecuting attorneys so that we may be able to secure better enforcement of such laws as we have.

Dr. Sharp said W. Va. was among the first of the states to get medical legislation, and has to-day as good medical laws as almost any other state. If one doctor writes a paper on any sanitary subject for the public press and signs his name to it, other doctors are too quick to say he is doing it for advertising purposes. This makes men hesitate who are competent and who would otherwise be inclined to aid in properly instructing the public.

Dr. Strickler thinks we should make our law makers see that a man who is licensed to practice medicine is capable of doing what he pretends to do and is paid for doing.

Selections

PROLONGED PREGNANCY.

Adam H. Wright, B.A., M.D., of Toronto, Professor of Obstetrics, University of Toronto.

This short article is intended as a sequel to a paper on "Induction of Labor at Term as a Matter of Routine," published in the *American Journal of Obstetrics* two years ago. Since that time observation of cases, consultations, and conversations with fellow-practitioners have given me more definite opinions as to the evils of prolonged pregnancy.

The following recommendations were made in the paper referred to:—

—Induce labor in all cases within two or three days after the expected date of confinement without waiting for any signs of labor.

First plug the vagina according to the Schauta method, making a special effort to pack the vault tightly.

After packing allow the patient to get up and go about if she wishes.

Remove the tampon in twenty-four hours, introduce a new plug and again allow the patient to get up, and go about if she chooses.

Remove the second tampon in twenty-four hours after its introduction.

If by this time labor has not commenced it is generally advisable to pass a bougie into the uterus before introducing the third tampon.

A few remarks will now be made in reply to criticisms and certain questions which have been asked. For the purposes of our present argument we shall consider the results in a pregnancy prolonged one month after term.

First, as to Child.—The growth of the child in utero after it becomes viable is very rapid. At the end of seven months the average weight is 1,400 grm.; at the end of eight months, 2,200 grm.; at the end of nine months, 3,470 grm., the increase in the latter month being nearly 58 per cent. The probable increase in the tenth month is 2,000 grm. In other words a child weighing seven pounds at term will weigh eleven at the end of another month. A child weighing nine pounds will weigh thirteen or fourteen pounds. In addition the child loses to some extent its flexibility; "universal flexion" is not so marked; worse still, the head becomes hard because of ossification.

We cannot speak so definitely as to the effects on the mother. We may say, however, that her nervous system is more or less seriously affected, she is frequently much depressed, and her general health is impaired in many ways.

The difficulties we meet in conducting the labor are always great—sometimes tremendous. The large ossified head neither moulds nor flexes properly.

In a large proportion of cases the occiput turns to the rear. The uterine contractions are unduly painful, and unsatisfactory in many ways. They commonly become weaker or cease altogether just at the time when the expulsive forces are required. Interference is generally necessary, and the results are frequently, if not mostly, disastrous for both mother and child.

Such evils are generally recognized, but many think that it is not right to subject the patient to the risk involved in the induction of labor unless grave dangers arise. The gravest danger is really the growth of the child in the

uterus; and this we should not fail to appreciate, although we cannot see it. If the induction of labor is done in an aseptic way it is practically devoid of danger. In any case it involves much less danger than a labor when a pregnancy has been prolonged to ten months.

One of the objections raised is that we cannot always tell when the patient has reached "term." For instance, there may be evidence to show that conception has occurred, not shortly after the menstrual period, but a little before the next period should have commenced. In such a case, or in any case of doubt, the accoucheur may obtain evidence by both external and internal examination which may assist him in arriving at a correct conclusion. If the matter still remains doubtful it may be well to wait for one week before inducing labor. It is safer, however, to induce labor one or two weeks before "term," than two weeks after.

Many questions have been asked about methods of procedure. The Schauta method of vaginal tamponade is not effectual in a large proportion of cases. Such being the case it seems better in the majority of cases to introduce a tube or bougie into the uterine cavity as the first step. The parts should be prepared as for vaginal hysterectomy. The patient is usually placed in the lithotomy position—"across the bed"—in private practice A "weight" speculum is introduced, and the cervix is fixed with a tenaculum forceps. A sterilized gum elastic bougie (No. 12 English) is introduced gently within the uterus up to the fundus if possible, care being taken not to rupture the membranes. If membranes are accidentally ruptured, little harm will result if the vault of the vagina is at once tightly packed. Little, of Montreal, uses a medium-sized rectal tube with a flexible metal director; and finds this sufficient in all cases, while the smaller gum elastic bougie alone sometimes fails.

In my own practice I always use the vaginal tampon after the bougie is introdued. There is generally about an inch of the bougie in the vagina below the cervix. The patient is turned from the back to the Sims position, and the Sims speculum is introduced in such a way that the vagina is "ballooned." The gauze (medicated generally with iodoform) is introduced, and packed tightly over or around the small portion of the bougie projecting into the vagina. The bougie is quite flexible, and the portion below the cervix is generally turned at a right angle while the gauze is being introduced. The aim is to pack very tightly the vault and upper two-thirds of the distended vagina. If the lower third is tightly packed it causes great pain, and frequently retention of urine. During the last few years I have used ordinary cheese cloth instead of gauze, for reasons which do not apply to our present argument. The material is cut into strips, four and a half inches wide and four yards long. One of these strips is usually sufficient for packing; but occasionally a little less or a little more is used. This strip represents one half square yard, i. e., a piece of cheese cloth one yard long and half a yard wide.

The material (5 per cent. iodoform cheese cloth) is prepared as follows by Miss Margaret Lash, of Toronto:—

Take four yards of cheese cloth (good quality) twenty-seven inches wide. Tear (not cut) into strips four and a half inches wide and full length. Sterilize these strips and then boil in sterile water. Wring them as dry as possible (having hands covered by sterilized gloves) and thoroughly saturate them in the following preparation—

Eight ounces of a one per cent. solution of carbolic and sterilized water.

Enough castile soap to make a suds.

Three drams and one scruple of iodoform powder.

Mix thoroughly in sterilized basin with sterilized pestle or glass rod.

After thoroughly saturating strips, wring as dry as possible.

Pack gauze strips, one after another, into sterilized glass jars, and seal down while moist.

In some cases as before mentioned, the vaginal tamponade is sufficient to induce uterine contractions, and bring on labor. In all cases it appears to have a good effect in dilating and softening the vagina, the pelvic floor and the perineum.

I may say incidentally that in dry labors my custom now is to introduce the tampon as soon as possible after the rup-

ture of the membranes. For such a purpose the cheese cloth is also better than gauze, because it is more likely to keep the liquor amnii, or a portion of it within the uterine cavity.

Another question frequently asked is this: Do you often find that introduction of the bougie, and especially of the tampon, produces pain? Yes, it frequently does, and I often desist, and get an assistant to administer an anesthetic—preferably ether. In such a case I always introduce both the bougie and the tampon.

Does protracted pregnancy frequently occur? So far as we can judge from the statistics of those who have investigated the matter it would appear that it occurs in about 15 per cent. of all pregnancies. Protraction to the extent of four weeks, or one month after term, probably occurs in 6 per cent. of the cases when there is no interference.

Is it still deemed advisable in all cases to induce labor, at or shortly after full term? As to this question, I shall speak now for myself alone. Careful observation and increased experience have fully confirmed my opinions expressed two years ago. I think, therefore, that it would be well, for both mother and child, to make it an ordinary matter of routine to induce labor in all cases within a few days after term.

30 Gerrard Street East.

Interstate Journal.

(We print the above to inform our readers of the so-called advances in medicines, but we do not think the practice suggested will ever come into general use or that it should. In over forty years experience we have met with but one case in which we felt certain that the patient went beyond term. This was a case of acranial monster. To advise the bringing on of labor when full term is *supposed* to have arrived, would certainly result in the death of more infants and more mothers than to wait for natural delivery in the very rare cases in which pregnancy goes beyond the natural term. We know of a New York obstetrician who induces labor in all cases at the termination of the eighth month, when he is permitted to do so. Let us hope that there is only one such malpractitioner in the profession.—EDITOR.)

POSTURE OF THE LYING-IN PATIENT.

George Clark Mosher, M.D., Obstetrician to the German Hospital, etc., Kansas City, Mo., (*American Journal of Obstetrics*, October, 1911), says that the striking variations in method of posture of the puerperal patient which he has observed in cases seen in consultation practice indicate to him that this is a subject still unsettled.

An investigation undertaken for the purpose of obtaining a concensus of the best scientific opinion as to the posture of the lying-in woman has revealed a wide difference in the teaching and practice in this country, and the methods at present advocated by some German obstetricians.

These German authorities differ radically from our teachers in advocating most heroic treatment and assure us that women who are kept but three or four days in the horizontal decubitus fare better than those who are longer in bed.

The following brief reviews may indicate the attitude of some of our German confreres toward this most important subject.

Von Alvenslaben (Zent. fur. Gyn., September 5, 1908) gives the arguments for early rising of puerperal subjects, analyzing the reports of the clinic at Kiel, where the patients are allowed to be on their feet from the first to the fourth day in normal cases. In his one hundred observed women, the primiparae were allowed to be up the third day for an hour; finding in these that the functions of appetite, bowels and bladder, all showed improvement over the average, where the customary nine days in bed were required, the multiparae were subsequently allowed the same privilege. Severe hemorrhage was not considered a contraindication of the permission. The only cases not included were those in which difficulties in delivery resulted in deep laceration of the soft structures or in severe infection. The woman who was strong and healthy was required to take gymnastic exercise in bed daily.

Wilhelm Rosenfield (Gyn., Rundschau H., 11, 1908), argues on the same line,

that the routine position on the back during the lying-in period of nine days is a cause for retrodeviation. He quotes gynecologists who have their patients up in three hours to urinate and obstetricians who have their patients taking special gymnastic exercises beginning the third day, including movements of the abdominal muscles, and sphincters of anus and vulva mornings and evenings. In patients with normal temperature, the upright posture is permitted the third day for an hour or two. This it is claimed aids in involution and increases voluntary action of bladder and bowels. He leaves open the question as to whether embolism, prolapsus, or retrodeviations may follow, but claims that prolapsus will never occur unless there is a previous lesion of the pelvic floor, resulting from stretching or lacerations of the fibers.

The various experiences of the hospitals and private practitioners who have reported their cases in which early getting up was advocated is tabulated by Robert Mullerheim (*Berliner Klinische Wochenschrift*,), November 8, 1909.

He at first objected to the gymnastic exercise in bed and also to allowing women to be up a few hours after labor and leaving the hospital at the end of the week. He has been convinced by observation that the gymnastic exercises have considerable value, but has adopted a middle course in reference to the radical change of posture. His idea is that however well the early getting up resulted in the hospital, it is of doubtful benefit among working women in their homes, as they are no sooner out of bed than they resume work.

As to the occurrence of embolism, the practice in Java is a very interesting and valuable object lesson. There the paturient is not allowed to go to bed after delivery. Embolism as well as prolapsus anemia and neurasthenia are very frequent.

Dr. Reuben Peterson says, "If the patient is a working woman, and not too much exhausted by severe labor, I think best to have her out of bed on the ninth day. Sometimes for one reason or another this period is cut down. I do not urge early getting up, not that I think it would injure the patient, but because rest in bed is favorable to the lying-in woman. I am very much opposed to the passage of the catheter in the nonpregnant, the pregnant, or the lying-in woman. If after twelve hours, the puerpara has not passed water after effort to have her empty the bladder, I have the nurse swing her out of bed and place her on the commode. I have done this even when stitches have been taken. It is usually successful. I urge the patient to lie on the side as much as possible to insure drainage. I allow her to sit up in bed after a few days."

Dr. Barton Cooke Hirst says, "I have so far modified my former practice as to allow a patient to sit up in bed after child-birth to use the bed pan, if it is impracticable for her to do otherwise. I do not allow the patient to get out of bed, because of the possibility of embolism."

Dr. J. Whitridge Williams writes, "I have not yet been able to convince myself of the correctness of the advocates for early rising, and I believe it will soon prove a useless and possibly dangerous fad. I note that Dr. Charles White advocated it in 1780. Goodsell also recommended it in the early seventies, but as the practice did not find many imitators, I imagine it was not found to be advantageous. It is my practice to keep the woman in bed for ten days or two weeks following labor and then allow her to be about on the floor on which delivery took place until well into the fourth week."

Dr. Joseph B. DeLee says, "Regarding the puerparae and their posture, usually I ask them to remain in bed from nine to eleven days, quiet on the back or side for two days, then give them the full freedom of the bed.

In bowel movement and urination, they may sit on the bed-pan if the result cannot be obtained on the back. Back rest is given from the eighth day. Out of bed the ninth to fourteenth day, depending on labor (whether forceps, etc.) condition of lochia and fever."

The letter of Dr. Franklin S. Newell suggests that the method varies with individual cases. His patients are kept practically flat for two weeks, the back

rest is given the first, and at the end of the third week the patient is up in a chair.

Dr. Charles S. Bacon follows more closely the German method above outlined. He says, "My instructions for 'setting up exercises' in bed when ordered is generally that on the fourth day they begin and continue throughout her stay in the hospital. When allowed to get up she is to walk across the room, and sit down, but will remain out of bed only ten minutes the first day and twenty the second."

Dr. J. Clarence Webster writes, "I am certain that patients recover strength less quickly when they are kept too long in the recumbent posture. I do not use the catheter until twelve or fourteen hours have elapsed after labor. I advise sitting up out of bed for a short period the twelfth day, a few steps being taken on each occasion, the commode is to be used after the fifteen day."

In the meantime, the rule to be laid down from the present state of knowledge is that the involution of the uterus, the color of lochia, and general condition of the individual patient must govern the conduct of the case, rather than an arbitrary time limit, based on the number of days following delivery.

Old Dominion Jour.

SUBSTITUTES FOR MOTHER'S MILK.

(We are glad to reproduce the following, one of the "prize" answers to the *N. Y. Medical Journal's* question on above topic.—Editor.)

Dr. W. T. Morris of Wheeling, W. Va., observes:

The most important question in infant feeding is to give the baby the proper amount of food, and the best way to accomplish this is to determine the caloric requirement of the baby. An infant should have about 100 calories to each kilogramme of the body weight in twenty-four hours.

The percentage method of infant feeding has the disadvantage that the fats are in excess and the proteids are insufficient, which results in an undernourished, but not necessarily an underfed baby. It is a great fallacy to believe that cow's milk can be modified to resemble the human product by simply changing the proportions, because the main difference is in the chemical composition of its constituents. Cow's milk also contains numerous bacteria.

A simple method of computing the caloric value of infant food is to take as a basis that one ounce of four per cent milk equals twenty-one calories, the same quantity of sixteen per cent cream fifty-four calories, of skimmed milk ten calories, sugar 120 calories, and cereal water about three calories. Our estimate is now made by multiplying the number of ounces of each ingredient, in the twenty-four hours' quantity, by the caloric value and add the product. The "energy quotient" can now be determined by dividing this product by the number of pounds the baby weighs, and then multiplying the result by 2.20 to reduce to kilogrammes.

An alkaline reaction will prevent the formation of curds, as the casein is converted into a basic salt, usually of calcium. In buttermilk the casein is present in the form of casein lactate, consequently there is no curd, and as it contains little fat, it is an ideal food in digestive disturbances.

The excess of proteid does not cause nearly the amount of trouble that has been attributed to it. Too much nitrogenous matter causes an overproduction of animal heat without building up body weight, consequently the skin, kidneys, and respiratory organs are overworked to get rid of the extra heat and nitrogenous waste.

Fat usually causes the curd in the infant stool, as well as many digestive disturbances, and the proportion used should rarely exceed four per cent. The ratio between proteids and fats can be roughly stated as three to one in the very young, two to one from the fourth to the eighth month, and about equal after that time.

After six months the baby needs more proteid, iron, mineral salts, etc., and unless it gets them will present symptoms of malnutrition, even scurvy. The deficiency can be supplied by beef juice, which in itself is not very nutritious, but combined with some cereal acts nicely. Albumin, as the white of egg, may be given, cereal water may be used as part of the diluent, or a little fruit juice between feedings, but perhaps the best way to supply the deficiency

is by the use of some of the commercial products.

The prepared foods and milk modifiers are numerous, and each differs in some particular, but has the same end in view. One class of prepared foods is composed of dried condensed milk to which has been added some cereal flour partially dextrinized; the objection to it is that it contains free starch. Malted milk is similar, but the cereal is malted and contains maltose and dextrose, but no starch, and is less objectionable. These foods require only the addition of water. Another class, called milk modifiers, contain the malted cereals and are consequently rich in carbohydrates with a fair amount of proteid. These are mixed with milk and are the best type for general use. There are many others which may be put into a miscellaneous class, and some of them will be valuable adjuncts at times. All the commercial foods are poor in fat. Last, we have the preparations of pepsin, which may be of great value in time of digestive disturbances, but should never be used for a long time.

FEES.

The income from a medical practice rarely equals the income obtained by men of equal ability, whose education and capital are invested in commercial pursuits, notwithstanding the great responsibilities physicians carry which laymen escape. The principal reason for this is that physicians have a constant tendency to settle down to a level—and that the lowest level of professional fees—from which they find it difficult to rise. There is too much tendency to dull routine in charges. There should exist a wide range of charges for medical services, depending on several factors, such as the severity of the case, time given to it, the dangers to the physician and his practice, and the ability of the patient to pay. People should be impressed with the fact that the fee bill represents the minimum fee for ordinary services only, and that when special attention is required a fee in accordance with it should be expected. This is done in surgical cases: why not in medical cases?

The price of a visit does not necessarily pay for services rendered. When, therefore physicians try to collect something for extra services they are invariably confronted with the settled price of a visit. Such a procedure by no means compensates the physician under all circumstances. A rich man will have his life saved for a thousandth part of what he will pay a lawyer to save his business, and then he will object to the physician's bill. The lawyer long ago learned to value and to charge for special services according to their value and according to the ability of the client to pay; he no longer charges so much a visit or consultation.

When a physician has saved a patient from death or from poisoning he should charge for a major operation, which is what has really been performed, and he should not send a bill for $2 for a night call. It is the medical profession's duty to educate the unthinking public to appreciation of the fact that it take more skill and a finer quality of judgment to carry a patient through a long period of critical expectancy terminating in a successful accouchement, than to amputate an arm or a leg, and that physicians should be paid accordingly.

In attending contagious diseases physicians incur danger to themselves, their family and their practice. They should be compensated for the risk and the loss sustained, by a reward at least double that received in ordinary cases.

There is no need of rendering an itemized account to patients. In making out a bill, medical men should take into consideration time, ability and service; nothing less than this will insure the justice that they deserve. Unless physicians come to some understanding of this kind with themselves, unless they ask for a professional fee in proportion to their service and without fixed rates, they will never be paid for what they do. For example during certain stages of a case of pneumonia or diphtheria, it is important that they be able to watch the case very closely and adapt treatment to the varying conditions, instead of making a regular visit and going back to the office to await further summons. If a lump charge be made, they will feel at liberty to call as often as necessary.

The dead-level fee—the same price for everybody—for all kinds of cases—should have no place in medicine.—DR. CHAS. HAASE in *J. A. M. A.*

The *Christian Register* has the following editorial:

"The death of Dr. Nelson of the Harvard Medical School adds another name to the long list of heroic students of human disease, who have lost their lives in the pursuit of knowledge and in the quest of some remedy or antidote. The bacillus of a rare intestinal disease had been identified in the laboratory of the Johns Hopkins University. Dr. Nelson gave himself with zeal to the study of this bacillus, in the hope of banishing the disease that it caused, and he thereupon began the study of the disease in his own case and invited the attention of his medical friends. In spite of all that they could do, the disease made steady progress until he died. We commend this case to our well-meaning friends who are working in the interest, as they suppose, of dumb animals, and are publishing statements which, being accepted, would lead us to believe that the medical faculty is dominated by cruel men, who enjoy the infliction of horrible torture upon animals. The present writer owes his life and that of several of his friends to the fact that by experiments made upon animlas and upon themselves medical men have been able to perform operations which thirty years ago would have surely resulted in death.—G. D L.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*
ASSISTANT EDITORS
L. D. WILSON, A.M., M.D., G. D. LIND, M.D., Ph.D.,
C. A. WINGERTER, A.M., M.D, LL.D.

WHEELING W. VA., AUG., 1912.

THE JOURNAL is issued on the first of each month.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the th of each month.

Advertisements of proprietary medicines must he accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should he made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

OUR FORTY-FIFTH ANNUAL MEETING.

We are growing old. Our existence began away back in 1867 on the hill-top at Fairmont, and this year a Fairmont man, faithful to the cause for many years, presided with ability over the deliberations of our State Association and kept things going, even calling down some of our visitors with a gentle rap of the ivory gavel that he knew so well how to handle. This is the way to keep up the interest in a meeting, otherwise some of the long-winded ones will unconsciously make things rather dull. All will agree that President Henry is an excellent presiding officer.

The Webster Springs meeting was a success. Ninety-four members and guests were in attendance, and interest was added to the occasion by the presence of quite a number of the wives and daughters of the members, who helped the wifeless ones to pass some enjoyable hours in the intervals of the meetings. We may be in error, but it has always seemed to us that no body of men get quite as close to each other as do physicians at these annual gatherings. They may have their tiffs in the House of Delegates over some disputed points, but emphasis of language is by no means evidence of an angry spirit, rather only of zeal in the cause. One must be zealous if he expect to win in this strenuous life.

Webster Springs is an ideal place in which to hold a scientific gathering, and the Committee on Arrangements, with the genial Judy at its head, had done its work well. Here are no side attractions to draw the members away from the the place of meeting, no roar of trade, clatter of machinery, puffing of railroad engines, tooting and rattle of automobiles to disturb the serenity of the place. It is out of the beaten path of travel, and only reached by one train a day and that on a narrow gauge road; but the scenery along the route from Holley Junction is such as one rarely beholds, and makes the ride to the Springs one well worth while. The "Switzerland of America" certainly shows at her best in this region, and only needs a few snowy caps on her majestic mountain peaks to transport one in imagination to the Alpine region of our sister European Republic, and even over there are missing the beautiful variety of verdure that is seen on these West Virginia mountains from base to summit.

Pleasure and profit resulted from the presence at this meeting of a number of guests from the cities, and their active participation in the written and oral discussions. Drs. Barker of Baltimore, MacCuen Smith and Massey of Philadelphia, Beebe of Cincinnati, Williams of Washington, and Horsley of Richmond placed theAssociation under obligations by their contributions. It is worthy of a passing note, that the presence of these widely-known teachers did not deter our own members from freely engaging in the discussion of the papers read. It was not always so. The West Virginia profession is not what it was forty years ago. We recall the time when it was difficult to get the members, with some few exceptions, on their feet in a discussion even among themselves. Better men of more liberal education and larger experience are coming to the front,

and our standard is rising with that of the country at large. The organization of societies throughout the state has had a no inconsiderable part in stimulating advancement along all professional lines. Let the good work of organization go on, and let our local meetings be as frequent as possible, with well prepared programs, and the result will be to elevate the profession, to better fit its members for their responsible duties, and to give it a higher character in the estimation of the people.

The public address of Dr. Hupp was delivered to an audience that packed the Court House. It was heard with marked approval, for it was a strong presentation of the magnificent work done for humanity by our research laboratories, and no less a pronounced and just condemnation of the foolish and cruel schemes of the anti-vivisectionists to thwart the efforts of our professional brethren to devise means of preventing and curing disease.

Some changes were made in our By-laws touching medical defense. We would have preferred to see the law stand until its merits were tested in the courts. Since twenty-three states have essentially the plan our Association has had for two years and are satisfied with it, we think it must have been about the best attainable plan. But the majority of the House of Delegates thought otherwise, and as loyal members we submit without any intention of disturbing the operation of the law as amended. The plan was made voluntary on the part of the members, its control was turned over to the Council, which is to have an executive committee of three of its members, and any one will be defended who pays his dollar when his other dues are payable, which is prior to April 1st (see By-laws, Chap. ix., Sec. 13 and 14).

Since we already have a defense fund of about $1500.00, we are in a position to defend several suits. In the meantime the new method may show its merits or demerits. Let us at least hope that the change will make a thoroughly united and harmonious body, determined to move actively forward in the advancement not only of our own interests but those of the people whom we serve.

The Committee on Defense was instructed by resolution to send a circular letter to every physician in the state who is reported by the local secretaries as eligible to membership, setting forth the benefits of membership in our Association. We trust that the secretaries will make a note of this action, and at the earliest possible day send to Dr. H. P. Linsz, Chairman of the Council, a list of names of those who may be considered worthy of membership. The committee (Linsz of Wheeling, Johnson of Fairmont, and Link of Parkersburg) will do the rest.

A resolution was also adopted making the term of office of all the officials of the Association to begin January 1st after their election. The newly elected officers will therefore assume their duties next January, serving through the year 1913. The fiscal year of the Association will correspond with the calendar year, and all reports, financial and otherwise, should embrace the transactions of the year ending December 31st. Thus no confusion will arise as to the payment of salaries, as has been the case at times in the past.

The next meeting is to take place at Charleston in May. The change from Autumn to Spring was made by unanimous vote, and hence it seems probable that future meetings will be held in May. However, according to our By-laws the time of meeting is to be determined at each annual session. Circumstances may arise to make it desirable again to alter the date of meeting. This may be safely left to the future. Let us get ready to have the largest meeting in the society's history at the State Capital next May. S. L. J.

WANTED—Several copies of the JOURNAL for March, April, September and November, 1911, and for January, 1912. Thanks in advance for any or all of these.

FOR SALE—A ticket to an Eastern Post-Graduate Medical School, at a reduction in price. Apply soon or you will get left.

In chronic catarrh, the first suggestion of ethmoidal sinus disease may be the appearance of thick, adherent, stringy mucus in the nasopharynx.—*American Journal of Surgery.*

The International Congress on Hygiene and Demography will be held at Washington, September 23-28.

The local committee extends an invitation to the physicians of West Virginia to participate as auditors. By paying five dollars membership may be obtained. and this entitles one to take part in the discussions and to attend the entertainments, which include a reception at the White House, a ball in the Pension Office and numerous smaller functions. Special provision will also be made for ladies accompanying members. Any further information can be furnished by the undersigned or by the secretary, Dr. John Fulton.

TOM A. WILLIAMS, M B., C. M.

The fourteenth annual meeting of the American Hospital Association will be held in the Hotel Ponchartrain, Detroit, Mich., on Tuesday, Wednesday and Thursday, September 24, 25 and 26, 1912. A number of very interesting papers will be read. Hospital construction, out-patient work, the training of nurses and many other interesting topics will receive full discussion.

The September number of The Proctologist will contain all the papers and discussions of the American Proctologic Society for 1912.

Dr. Katherine L. Storm, who a few years ago patented the Storm Binder, has recently obtained patents in England and Canada on this supporter; also another patent in the United States for improvements that have been made to meet the extended requirements for a high belt for floating kidney-ptosis. etc., with a minimum of pressure, heat and weight across the back of the patient. It is said that more of these supports are sold than any other now before the profession. They are reliable and do the work claimed for them.

Prof. Hoxie of the University of Kansas, in his late work, says "the dangers of infection should ever be in mind when applying a poultice, for the maceration favors infection."

It is thus noted how important it is in the employment of a poultice for the relief of pain and inflammation that a sterile and trustworthy product be applied. Inasmuch as poultices are a means of producing Hyperemia by the use of heat, and insofar as they do this better than by other means, it is interesting to observe that in the belief of Prof. Hoxie that "the clay poultices, known best in the form of antiphlogistine, are the best to employ, as they are sterile and clean."

Antiphlogistine affords not only a safe but clean method of utilizing the advantages of hot moist heat in the treatment of pain or inflammatory conditions. It maintains heat in contact with the part for hours, and its adaptability is only secondary to its therapeutic value.

THE HAY FEVER RIDDLE.

For use in the treatment of hay fever there is, of course, a long line of so-called available medicants. One dependable agent which comes naturally to mind in this connection is Adrenalin. Indeed, it is doubtful if any other single medicinal substance has been so largely and successfully employed in the treatment of vasomotor rhinitis. As adapted to the needs of the hay fever sufferer the product is available in a number of convenient forms, as Adrenalin Chloride Solution, Adrenalin Inhalant, Anesthone Cream, Anesthone Inhalant. Anesthone Tape, etc. The various solutions are used in spraying the nares and pharynx, the cream for snuffing into the nostrils, the tape for packing the nostrils. All cases of hay fever, of course, are not amenable to the same form of treatment. It is a logical presumption, however, that a vast majority of them ought to yield to one or more of the preparations above referred to. The Adrenalin products, as is well known to most physicians, are manufactured by Parke, Davis & Co., who will doubtless be glad to send literature regarding them to any practitioner. Requests for printed matter may be addressed to the company at its main offices and laboratories in Detroit, Mich.

State News

Deaths.—Dr. Gail Samuels, late of Parkersburg, a member of our Association. died a few weeks ago. We have no particulars as to his life or death.

Dr. Israel Bedell, a retired physician of Warwood died May 28th. Born in New York in 1834, graduated from the New York University, was Assistant Surgeon of 6th Ohio Infantry in the Civil war. Practiced in Nebraska many years. Came to Wheeling in 1907. Sometimes attended the Medical Society meetings but never did any practice in the city, owing to impaired health

* * *

Dr. H. G. Nicholson, of Charleston, announces by card that he will hereafter limit his practice to surgery. He will also continue his work as Superintendent of the Barber Sanitarium and Hospital.

* * *

Dr. Geo. A. Jennings, late of Sistersville, has removed to Oklahoma.

* * *

Dr. L. D. Wilson, accompanied by a sister, has gone on a trip to California Any typographical errors seen in the Journal in the next two issues can be charged up to the doctor's absence, as his eagle eye will not be on the "page proof" for a while.

* * *

The Ohio County Tuberculosis Sanatorium —"View Point"—is in successful operation, with a number of patients under treatment This institution is well located, five miles from Wheeling on the hills overlooking Elm Grove.

* * *

It is worthy of note that Dr. N. D. Price rode

horseback from Marlington, 62 miles to attend the Webster Springs meeting of our State Association and was able to play a good game of baseball after his arrival. Would that we had more of such enthusiasm among our members, many of whom find it difficult to attend medical meetings in their own county.

* * *

At a meeting of graduates of Jefferson Medical College held at Webster Springs, July 11th, a State Chapter of the Jefferson Alumni Association was formed, and the following officers elected: President, Dr. E. A. Hildreth, II., Wheeling, W. Va.; Vice President, Dr. C. S. Hoffman, Keyser; Secretary-Treasurer, Dr. H. P. Linsz, Wheeling. The Chapter hopes to have a yearly meeting, and any graduates of Jefferson who desires to affiliate will kindly send their names to the Secretary.

* * *

President-elect Hupp and family has gone to their summer home on Lake George for two months.

Society Proceedings

EASTERN PANHANDLE SOCIETY.

MARTINSBURG, W. VA., July 23, 1912.

Editor W. Va. Medical Journal:

Enclosed please find program of the last meeting of the Eastern Panhandle Medical Society at Rippon, W. Va., July 7, 1912.

We had an excellent meeting, about 35 physicians being present. Under separate wrapper I am sending you papers read at this meeing. The members of the Society and visitors were invited to luncheon by Dr. and Mrs. Howard Osburne.

Dr. Wm. Neill, Jr., of Charlestown, W. Va., was elected a member of this Society.

PROGRAM

Fractures (with lantern slide illustrations)
Dr. Robert P. Bay, Baltimore

The Phophylaxis of Typhoid
Dr. Henry W. Stoner, Baltimore, Md.

LUNCHEON

Management of Cases of Opthalmia Neonatorum—Dr. Hunter McGuire, Winchester, Va

Pre-Cancerous Lesions
Dr. Wm. Neill, Jr., Charlestown, W. Va.

A. BRUCE EAGLE, *Secretary.*

MINUTES OF THE FORTY-FIFTH ANNUAL SESSION OF THE WEST VIRGINIA STATE MEDICAL ASSOCIATION.

GENERAL SESSIONS.

Webster Springs, July 10th, 11th and 12th, 1912.

Wednesday, July 10th, 9:30 a. m. The Association was called to order by the President. Dr C. O. Henry.

Prayer by Rev. G. W. Marsden.

Address of welcome by Hon. E. H. Morton.

Response on behalf of Association by Dr. C. A. Wingerter.

President Henry delivered his address. See front page.

Drs. W. H. Sharp, C. W. Halterman and J. E. McDonald were appointed a committee to act upon the recommendations contained in the President's address and report to the House of Delegates.

Adjourned.

WEDNESDAY, 2:30 P. M.

Called to order by President Henry.

A telegram of greetings and congratulations was received from the West Virginia State Pharmaceutical Association in convention assembled at White Sulphur Springs, and one was sent them in return.

A paper on medical legislation was read by Dr. G. D. Lind. Discussed by Drs. Bloss, Judy, Wingerter and Strickler.

A resolution concerning the resignation of Dr. Wiley was referred to a committee of three—Drs. Judy, Sharp and Lind.

The orator in medicine, Dr. W. H. Yeakley, not being present, the first paper was that of Dr. W. J. Judy, "Etiology, Pathology and Treatment of Rheumatism and Allied Conditions." Discussed by Drs. Powell and Shawkey.

A paper on "Leukemia: With Report of Cases" was read by Dr. O. D. Barker. Discussed by Dr. Lind and others.

"Pyorrhoea" was the title of a paper by C. H. Chapman, D.D.S. Discussed by Drs. Lind, Bonar, Judy, Sharp.

The Public Address was delivered by Dr. Hupp at the court house, Wednesday, 8:30 p. m. Subject: "The Obligation of the Public to the Research Laboratories."

THURSDAY, 9:30 A. M.

Dr. S. McCuen Smith of Philadelphia read a paper on "Aural Diseases and Their Complications." Discussed by Drs. Johnson, Ogden, Bloss Link, Jepson, Powell and Halterman.

"Cancer a Motile Germ and the Meaning of this Fact to the Clinician," was the title of a paper read by Dr. G. B. Massey of Philadelphia. Discussed by Drs. Pepper, Venning, McDonald and Rodgers.

Dr. W. S. Link read a paper on "Septic Sore Throat." Discussed by Dr. L. F. Barker of Baltimore.

"The Diagnosis and Treatment of the Commoner Forms of Renal Disease" was the title of an address by Dr. L. F. Barker of Johns Hopkins University. Dr. Barker promises to write this up in the form of a paper for the JOURNAL. Discussed by Drs. Wingerter, Hoffman, Jepson, McDonald, Campbell, Hupp, Shawkey and Massie.

Adjourned.

THURSDAY, 2:10 P. M.

Dr. J. S. Horsley of Richmond read a paper entitled "Some Recent Factors of Safety in Surgical Operations." In connection with this paper he exhibited a recent invention in the way of a

mechanical aid to blood vessel suture.

Dr. C. S. Hoffman read a paper on "The After Treatment of Surgical Cases." The papers of Drs. Horsley and Hoffman were discussed by Drs. Jeffers, Bonar and Mason.

The oration in surgery was delivered by Dr E. W. Strickler. Subject, "The Surgery of Our Own Country."

"Some Points in Gall Duct Surgery" was the title of a paper read by Dr. G. C. Rodgers.

"Cholelithiasis and Pancreatitis: Their Surgical Treatment" was read by Dr. Oates.

The papers of Drs. Rodgers and Oates were discussed by Drs. Barker, Ogden, Horsley, Bonar and Butt.

Dr. H. P. Linsz read a paper on "Pelvic Injuries."

"The Treatment of Non-United Fractures" was read by Dr. R. H. Dunn.

These two papers were discussed by Drs. Sharp and others.

Mrs. J. M. McLaughlin, fraternal delegate from the W. C. T. U., gave an address, urging the medical profession to support the proposed constitutional prohibition amendment. A vote of thanks was tendered.

Dr. Frank LeMoyne Hupp exhibited a tube pilot and refractor of his own invention to be used in tracheotomy.

Dr. Charles A. Barlow read a paper entitled "Observations of a General Practitioner Entering Institutional Work."

The committee on Wiley resolution reported as follows:

"WHEREAS, The acceptance of Dr. Harvey W. Wiley's resignation as Chief of the Bureau of Chemistry is the most serious blow that has befallen Pure Food Legislation; and,

"WHEREAS, Dr. Wiley has stated that his resignation was due to the fact that the differences between him and his superior officers respecting the enforcement of the Pure Food law were so irreconcilable that the fundamental principles of this law, one by one, have been paralyzed and discredited; that those interested in the manufacture of misbranded and adulterated foods and drugs have escaped punishment; that officials who secretly plotted his destruction were retained in office after his exoneration of charges made against him;

"*Therefore be it resolved*, That we, The West Virginia State Medical Association, deeply deploring the retirement of Dr. Wiley from the Department of Agriculture and the retention of those in office who have opposed him, with the result that the Pure Food and Drug Law has not been enforced, do hereby urge upon the President of the United States the necessity of the immediate removal from office of the officials who have been directly responsible for the breaking down of the Pure Food Law; and, further, we urge the passage of such legislation as will strengthen this law which has been weakened by the recent decision of the Supreme Court of the United States, whereby the said Court held that the law did not prohibit the making of absolutely false claims for these preparations offered for sale for the cure of diseases.

"*Resolved, further*, That the secretary of this Association be directed to forward a copy of these resolutions to the President of the United States, our two United States Senators, and the five Representatives in Congress from West Virginia, and that likewise copies be forwarded to the following lay journals: *Collier's Weekly, The Philadelphia North American*, and *The Ladies' Home Journal*, to be published as news items at the option of these respective periodicals.

'Respectfully submitted,
"W. J. JUDY, *Ch'm.*
"W. H. SHARP,
"G. D. LIND,
"Committee."

The report was unanimously adopted.

FRIDAY, JULY 12TH, 10 A. M.

Dr. S. G. Moore read a paper on "Hemorrhage of the New Born." Discussed by Drs. Holland, Ogden and Sharp.

"The Non-Surgical Treatment of Lacerated Cervix" was the title of Dr. R. H. Pepper's paper. Discussed by Dr. Beebe.

A paper entitled "Placenta Praevia" was read by Dr. H. M. Campbell. Discussed by Drs. Venning, Schoolfield, Sharp and Rodgers.

Dr. A. P. Butt read a paper on "Eclampsia; Report of a Case Treated by Transfusion and Lumbar Puncture." Discussed by Drs. Judy, Sharp, Rodgers, Lind, Venning, Hatfield and Jepson.

Adjourned.

FRIDAY, 2:00 P. M.

Dr. Jas. R. Bloss read a paper entitled "The Etiology and Prognosis of Insanity." Discussed by Dr. Beebe in a very instructive lecture.

"Helpless" was the title of Dr. C. H. Maxwell's paper. Discussed by Dr. Sharp.

Dr. Sharp introduced a resolution to the effect that the Association memorialize Congress in favor of the Owen bill. Passed.

Dr. C. A. Wingerter introduced a resolution which read as follows:

"*Resolved*, That the Committee on Medical Defense is hereby authorized to prepare and mail to every reputable physician in the state not now a member of this Association a circular letter pointing out the advantages of membership in the Association, the expense of same to be paid out of the defense fund. Carried.

Dr. C. O. Henry, Vice-President Venning in the chair, offered the following resolution:

"WHEREAS, This Association went on record at its Clarksburg meeting declaring that alcohol was not necesasry in the treatment of disease; therefore, be it

"*Resolved*, That this Association endorses the ratification of the prohibition amendment to be voted on this fall."

Carried.

On motion of Dr. H. P. Linsz, seconded by Dr. Jepson, it was ordered that the term of office of all elected officers begin the first day of January following their election. Carried.

The usual vote of thanks was tendered the hotel management and the local medical society.

Drs. L. F. Barker, S. McCuen Smith, J. S. Horsley, B. F. Beebe and G. B. Massey were elected honorary members of the Association.

Adjourned.

C. O. HENRY, *President.*
A. P. BUTT, *Secretary.*

MINUTES OF THE FORTY-FIFTH ANNUAL SESSION

Of the West Virginia State Medical Association, Held at Webster Springs, July 10-12, 1912.

HOUSE OF DELEGATES.

TUESDAY, JULY 9, 9:10 P. M.

Called to order by President Henry.

Dr. H. G. Nicholson, Treasurer, read his report.

West Virginia Medical Association,
To Hugh G. Nicholson, Treasurer.

		Dr.	*Cr.*
1911			
Sept. 21	To S. L. Jepson, editor's salary	$ 400 00	
Sept. 21	To P. A. Haley, Councillor	12 00	
Sept. 23	To J. E. Rader, Councillor	5 35	
Oct. 17	To St. Louis Button Company	42 40	
1912			
Jan. 2	To W. Va. Medical Journal	241 00	
Jan. 15	To Check, Dr. G. D. Lind	25 00	
Jan. 15	To Check, Lohmeyer, Goldsmith, Patterson Co.	10 00	
Jan. 8	To W. W. Golden, medical defense	50 00	
Jan. 30	To F. S. Johnson Drug Co., supplies	6 50	
Mar. 11	To St. Louis Button Company	26 00	
Mar. 25	To Dr. A. P. Butt, stamps, etc.	28 09	
Mar. 25	To W. Va. Medical Journal	600 00	
Mar. 25	To W. W. Golden, medical defense	540 00	
Apr. 17	To Davis News	43 96	
May 17	To W. W. Golden, medical defense	100 00	
Feb. 10	To Grant, Hardy, Hampshire	3 00	
July 6	To Dr. A. P. Butt, postage	15 56	
July 6	To W. W. Golden, Chairman	90 00	
July 8	By cash on hand	1049 82	
Mar. 25	To W. W. Golden, medical defense	18 00	
1911			
Sept. 18	By cash brot for'd		$ 676 88
Sept. 18, 1911, to July 8, 1912,	By members' dues		2432 00
Jan. 5, 1912,	By am't from Journal		189 84
July 8, 1912,	By interest from Bank		7 96
		$3306 68	$3306 68

Referred to Council for audit.

Committee on Arrangements reported.

Committee on Medical Defense reported as follows:

In submitting the second annual report of the Committee of Medical Defense, it is a matter for congratulation, that thus far no suit has been brought against any of our members, nor, so far as the committee has knowledge, have there even been any suits contemplated or threatened. It would seem, from the experience of other states that have undertaken this project, that the protection it gives is as much or even more in the influence it has to discourage the bringing of suits than in the successful defense of them. In an endeavor to learn whether or not the scheme has given satisfactory results, the editor of the Journal addressed inquiries to a number of the secretaries of the various state societies where the plan is in operation, and the uniform reply was fewer suits brought, fewer brought to trial, and none lost. Such states as Pennsylvania, Maryland, Michigan, California, Wisconsin, Indiana are included in the number and are fairly representative of the field of action we seek to cover. To the committee it seems that the Association is amply justified in continuing the plan.

The expenses of the committee during the past year have been practically nothing outside of the retaining fee of its attorney. A trifling sum for postage, etc., which can not be reckoned up until the end of the year comprises all the additional expenditures. The committee has been fortunate in securing the services of Hon. John W. Davis as its attorney for the current year, at the same compensation as last year, namely, $100.

As will be seen by the financial statement, the fund in the hands of the committee is accumulating at the rate of six or seven hundred dollars a year. It will be advisable soon to determine to what amount this fund shall be allowed to accumulate. In two more years it will, unless drawn upon for defense of suits, amount to perhaps $2500. This sum deposited on certificate would yield an income of $100.00, a sum just sufficient to pay the attorney's retaining fee. Whether this sum or a larger one, shall be made the limit of accumulation, and whether the fund shall be allowed to accumulate at the present rate, or by reducing the amount of the annual dues to cause it to accumulate more slowly, are matters which the Association can decide at its pleasure.

In the financial statement which follows it will be noticed that there have been no expenditures so far during the year. By the end of the year the fee of the attorney will have been paid, and a trifling sum for postage, etc. These items cannot be stated in this report for the reason that the Association meets this year about three months earlier than its appointed time.

FINANCIAL STATEMENT.

1911.

Balance Sept. 21, 1911, as per report made at White Sulphur Springs	$623 59	
Received December, 1911	50 00	
Received March, 1912, (to be applied to 1911)	18 00—	$ 691 59
1912.		
Received March, 1912	$540 00	
Received May, 1912	100 00—	640 00
		$1331 59

Of the above amount, $1000 is deposited in bank on certificate drawing four per cent interest. It is the expectation of the committee to keep the entire fund, so far as practicable, deposited on similar terms.

Respectfully submitted,

WM. W. GOLDEN, *Chairman.*
L. D. WILSON,
J. W. MCDONALD,
Executive Committee on Med. Defense.

NOTE:—Since the above was written, the committee received, July 8, 1912, a check for $90 from Treasurer Nicholson, thus making the total receipts for the current year $730 and the total amount in the hands of the committee $1421.59.

On motion the report was referred to Council.

Adjourned.

WEDNESDAY, 10:15 A. M.

Committee on Publication reported as follows:

Webster Springs, July 11, 1912.

To the House of Delegates,

Gentlemen: The report of the business of the Journal to July 1, 1911, was presented to last year's meeting and audited by the Council (see page 175 of the Journal). At that meeting, at the suggestion of the editor, the fiscal year of the Journal was changed so as to correspond with the calendar year. The present report, therefore, embraces the business of the year 1911. Since the details of the first half of that year have been examined and approved by the Council, a summary only is here presented, the items for the second half year being given. To date this shows a deficit of $155.55. As an offset to this we have on our books about $60.00 of collectable accounts for advertising. Up to this time we have received from the Association treasurer $825.00 on account of membership dues for 1911.

Although not an essential part of this report, it may be interesting to note that for this year all expenses except the editor's salary have been paid, and we have in bank $650.00, and have received from membership dues of 1912 to date but $600.00, leaving over $200.00 still due.

No business concern can hope to prosper abundantly with such a poor system of collection as that of our societies. Every member should pay his dues in January, and we can not but think that this very desirable end can be accomplished by the institution of some correct system in the method of collection. We know of one society about twenty of whose members have not yet paid for this year, at least three-fourths of whom would be glad to pay cash on presentation of their accounts. Doubtless a somewhat similar state of affairs exists in a number of our societies. We suggest that blank bills be printed by the local societies or by the state association for the use of these organizations; that at the head be printed the fact that the Journal comes free to every paid-up member, and that the benefits of the medical defense fund can be had only by those who pay in the month of January; that these bills be sent to every member the first of January by the local secretary, and that a second reminder be sent to delinquents near the end of the month. In this way we believe the habit of paying promptly will be established, and after this the way will be easy.

As suggested in a recent editorial, every eligible member in the state now outside of our organization should be notified of our provision for malpractice defense, and of the fact that membership in our association also brings a free copy of a monthly Journal. If authorized to do so, no doubt the Committee on Defense will be glad to send out a circular letter covering these points, the cost to be paid out of the defense fund. The committee should receive from the local societies a list of eligible non-members within their bounds.

The larger our membership the more valuable becomes the advertising space, Hence the need of increasing our membership. We have been sending out each month over 1050 copies of the Journal. Nearly 100 of these go as exchanges and to advertisers. With proper effort along the lines above suggested, we can easily increase our members to 1000 or more. Let the effort be made.

It may be interesting to note that during the last year we have printed 63 original articles. Of these there were contributed from Ohio County 18, Kanawha 12, Cabell 9, Marion 4, Randolph 4, Berkeley 3, Harrison 2, Jefferson 2, Mercer 2, Barbour 1, Doddridge 1, Fayette 1, Marshall 1, Ritchie 1, Summers 1, and Wood 1. This leaves 38 counties from which no paper has been contributed. We have also received from the District of Columbia 3, Illinois 2, Pennsylvania 2, Idaho 2, Maryland 1, New Jersey 1, and Virginia 1, a total of 12 from outside the state. We trust that these data may stimulate the non-producing counties to do some work for the association and the Journal, and those that have done a little to do more. We need the aid of all who are interested in the prosperity of the organized profession, that the Journal may be made better, and also larger just as soon as our income will justify an enlargement.

Respectfully submitted,

COMMITTEE ON PUBLICATION,
S. L. JEPSON, *Chairman.*

FINANCIAL STATEMENT OF THE RECEIPTS AND EXPENSES OF THE JOURNAL FOR THE YEAR 1911.

Receipts.

1911		
Jan. June—Total reported last year		$ 630 86
July 5—W. A. Wycoff	sub.	1 00

July 5—W. P. Megrail	Journals	8 00
July 6—Ohio Valley Drug	ad.	6 25
July 11—Dios Chem. Co.	ad.	12 50
July 11—B. F. Beebe	ad.	10 00
July 19—From membership	dues	576 00
July 19—W. L. McLain	sub.	1 00
July 20—Dr. Chanfant	Jrnls. and sub.	1 30
July 20—W. B. McClung	sub.	1 00
July 22—D. Appleton & Co	ad.	5 00
July 22—Whg. City Hospital	ad.	37 50
Aug. 11—C. V. Gautier	sub.	1 00
Aug. 23—A. W. Adkins	sub.	1 00
Sept. 15—S. M. Mason (hospital)	sub.	32 00
Sept. 23—D. Appleton & Co	ad.	10 00
Sept. 23—K. Taylor	sub.	1 00
Sept. 23—E. R. Cooper		1 00
Sept. 26—J. L. Sivert		1 00
Oct. 23—Lewis-Clark Agency	ad.	4 46
Oct. 23—D. Appleton & Co	ad.	5 00
Oct. 23—Denver Chem. Mfg. Co	ad.	18 75
Oct. 24—L. K. Storm	ad.	9 50
Oct. 26—J. Coleman Co	ad.	6 25
Oct. 26—Kress & Owen	ad.	12 50
Oct. 27—Parke, Davis & Co.	ad.	23 73
Oct. 28—Chas. O'Grady,	Journals	3 00
Nov. 1—Sawyer Sanatorium	ad.	10 00
Nov. 2—Ohio Valley Drug Co.	ad.	6 25
Nov. 4—J. C. Archer	ad.	11 75
Nov. 10—J. C. McClellan	ad.	10 00
Nov. 13—Dios Chem. Co.	ad.	12 50
Nov. 21—W. Va. University	ad.	5 00
Nov. 22—B. F. Beebe	ad.	10 00
Nov. 28—Cincinnati Sanitarium	ad.	10 00
Dec. 16—S. M. Chalfant	sub.	1 00
Dec. 18—A. J. Quimby	ad.	10 00
Dec. 19—J. W. Williams	ad.	15 00
Dec. 20—J. Coleman Co	ad.	6 25
Dec. 20—Denver Cham. Mfg. Co.	ad.	18 75
Dec. 21—W. R. Thompson	sub.	2 00
Dec. 21—K. L. Storm	ad.	9 50
Dec. 21—W. P. Hubbard	sub.	1 00
Dec. 21—Ohio Valley Drug Co.	ad.	6 25
Dec. 23—Lewis-Clark Agency	ad.	4 46
Dec. 25—Sawyer Sanatorium	ad.	10 00
Dec. 31—Membership dues		249 00
Dec. 31—Kessler Hospital	ad.	16 00
		$1845 31
Collectable accounts		60 00
		$1905 31

Expenses.

Jan.—June as reported	$ 495 83
Jan. —Editor's salary	500 00
July 12—Book for Med. Ads	2 00
July 12—Whg. News, July Journals	75 56
July 12—June mailings	5 05
July 12—Postage stamps	2 50
Aug. 9—Whg. News, August Journals	81 95
Sept. 1—Expressage on book	45
Sept. 1—Postage stamps and cards	2 00
Sept. 15—Whg. News, reprints	2 50
Sept. 15—Whg. News, Sept. Journals	78 50
Sept. 28—Jarvis Engvg. Co.—half tone	1 50
Sept. 15—August mailings	2 86
Oct. 18—Whg. News, October Journals	79 74
Oct. —May mailings	2 50
Oct. —September mailings	2 66
Oct. —Postal cards and stamps	3 50
Nov. 27—October mailings	2 45
Nov. 27—Whg. News, Nov. Journals	77 40
Nov. 29—S. L. Jepson, acct. salary	200 00
Dec. 14—November mailings	2 42
Dec. 14—Postage stamps	2 00
Dec. 14—Whg. News, Dec. Journals	77 40
Dec. 31—Balance Dr. Jepson's salary	300 00
	$2000 86
	1905 31
Deficit	$ 95 55

On motion the report was referred to Council.

The Council's report on the report of the Executive Committee which had been referred to it on the previous day was as follows:

"We recommend that the By-Laws covering the Medical Defense be repealed and in their stead the following amendment be enacted":

(This embraces the amendments presented by the Council with the alterations made by the House of Delegates, as elsewhere noted.—Editor.)

Sec. 1. The Committee on Medical Defense shall consist of the Board of Councilors, three of whom shall be chosen each year from that body to constitute and act as its Executive Committee.

In case this Executive Committee fails to agree on any subject pertaining to the Medical Defense, the question in dispute shall be referred to the Council as a whole for disposition.

Sec. 2. The Executive Committee of Medical Defense shall employ an attorney for legal advice.

In case of litigation the attorney employed must be agreeable to both Council and defendants.

If said defendant wishes additional legal advice, the expense of such must be borne by said defendant.

Sec. 3. On and after July 11, 1912, it shall be the duty of the Executive Committee to investigate all claims of malpractice against members properly brought to its attention, and if in its judgment the case is one worthy of defense, the defendant must forward the papers connected with the case to the Chairman of the Council, who in turn shall forward same to the Executive Committee; but the committee shall not pay, nor obligate the Association to pay, a judgment, claim or settlement against any member. The same benefit is to be extended to the estate of a deceased member.

Sec. 4. The Executive Committee shall have charge of the Medical Defense Fund, which fund shall be secured as follows:

Each member of the State Association shall be assessed one dollar a year for this fund alone, to be paid with the State Association dues, and which shall be placed in the hands of the Executive Committee by the Treasurer of the State Association as soon as the latter receives the same from each component society. But the payment of this defense fee of one dollar shall be optional on the part of the member, the nonpayment of which shall not effect his membership in the State Association. No member can

become a beneficiary under this fun unless this fee, together with his Association dues, has been paid prior to the date of the alleged offense.

Sec. 5. The Executive Committee shall at each annual meeting of the State Association make, to the Council, a detailed report of all expenses incurred, and work done during the year ending the first of the month in which the annual meeting of the Association takes place, and Council in turn shall transmit as much of the report to the Association as it deems wise or necessary.

Sec. 6. No action shall be taken by the Executive Committee with reference to an act committed prior to January 1, 1911, or before the date of qualification of the accused as a member of the Association. Also, no action shall be taken by the Executive Committee for members who become habitually intoxicated, or who are addicted to the use of drugs, or members accused of criminal offense.

This defense shall be granted only to members residing in West Virginia, and not to non-resident or affiliated members.

Sec. 7. Any member desiring to avail himself of the provisions of this article shall proceed as follows:

He is to obtain a written statement from the secretary of his official local society that he is a member of that society and in good standing, and has paid his dues and assessments for the current year, in accordance with the Section 4 of these amendments.

This statement shall be sent to the Chairman of Council, who in turn will refer it to the Executive Committee for investigation.

In any case the defendant is to act in conjunction with the Executive Committee.

Sec. 8. The Executive Committee shall furnish all necessary legal service, all medical expert services, and pay all the necessary expenses connected with the case, provided, that nothing in this understanding between the State Association and its members shall conflict with united action in the defense by the officials of any corporation organized for this specific purpose with which the member may be connected, and provided, that when such connection exists, the State Association's share of expenses shall not exceed one-half.

This was laid on table for one day.

Adjourned to meet at 9 a. m. Thursday.

Thursday, 9 a. m. Met and adjourned to meet at call of President.

THURSDAY, 9:15 P. M.

Called to order by President Henry. Minutes read and approved.

The Committee on President's Address reported as follows:

"1st. As to the division of this Association into two sections—We recommend that the second day of each session be held under separate sections, one medical, one surgical.

2nd. We recommend that county societies drop from mebership any member who becomes permanently located in the jurisdiction of some other county or state society. The society so acting must notify said member at least three months before the cessation of such membership.

3rd. As to protection from illegal practitioners we fully concur, but believe that this is a matter for the State Board of Health, this being one of their specific duties.

We believe a prompt report of such illegal work by the county societies to the State Board of Health, together with the moral support of the Association, will bring about the necessary investigation and prosecution of these offenders.

4th. As to the Medical Defense funds we would recommend that the protection extend to all members who pay their full dues prior to April 1st of each year.

New members after July 1st should be assessed one-half yearly dues only. The Medical Defense Fund should at no time be available in the defense of acts committede before membership.

5th. We fully indorse the Owen Bill and request that the secretary of each county medical society take the same up by letter with their several Representatives and Senators in Congress, and that each member of this Association lend all available aid to secure its passage.

6th. We deplore the situation of contract practice in this state, and especially the conduct of eminent physicians who secure contract practice and employ the necessary assistance of other physicians at a nominal salary.

We further deplore the practice of fee splitting and hope soon to see our profession elevated above such conduct through a sense of our moral responsibility as well as ethical culture.

7th. Such other matters as the president has referred to we believe belong to the Council, and we hope that body will take proper action in the near future.

Respectfully submitted,
W. H. SHARP,
C. W. HALTERMAN,
J. E. McDONALD.

The report as read was accepted and approved.

The motion to repeal the section of By-Laws relative to Medical Defense and amend same, which had lain on the table since the day previous, was now read by Dr. Linsz.

Dr. C. A. Wingerter offered the following resolution:

"*Resolved,* That the whole matter of Medical Defense be taken under consideration by the Council acting with the President and Secretary; and that this joint body acquaint itself in detail with the experience of other State Associations that have adopted the same, and make a complete report at the next meeting of the Association."

Motion was declared lost.

Dr. J. E. McDonald offered the following substitute to the amendment: In Section 2 strike out the words "be empowered to" and "whenever necessary." The section would then read "The Executive Committee of Medical Defense shall employ an attorney for legal advice."

This substitute was agreed to by Dr. Linsz.

On motion of Dr. A. P. Butt the discussion was limited to three minutes for each speaker and no one to speak more than twice.

Dr. Wingerter moved that no change be made

in the By-Laws relative to Medical Defense other than making it optional. Lost.

The amendment as offered by the Council was then voted upon. Carried.

Adjourned to meet at 9 a. m. Friday.

FRIDAY, JULY 12TH.

Called to order by President Henry at 9 a. m. The House proceeded to the election of officers, with the following result:

President.....Frank LeMoyne Hupp
First Vice President.....Jas. R. Bloss
Second Vice President.....W. F. Shirkey
Third Vice President.....E. W. Smoot
Secretary.....A. P. Butt
Treasurer.....H. G. Nicholson
Councilor—First District.....H. P. Linsz
Councilor—Second District.....T. K. Oates

On motion of Dr. Butt there was no election of Councilor for Third District.

Councilor—Fourth District.....W. S. Link
Councilor—Fifth District.....J. E. McDonald

Charleston was declared to be the place of our next meeting. Time, May, 1913.

Adjourned.

FRIDAY, 3:55 P. M.

Called to order by President Henry.

Report of Council was read.

REPORT OF COUNCIL (1912).

The Annual Meeting of Council was held July 10, 1912, 10:30 a. m., at Webster Springs, W. Va.

Present: Drs. Link, Jeffers, Johnson and Linsz (Chairman).

At a meeting of the House of Delegates, held during the evening of July 9, 1912, there was a great deal of discussion for and against the Medical Defense. Some wanted to have it discontinued, while others wished to have it continued. After some debating, it was finally decided to refer the matter to Council for consideration and suggestions and report.

After lengthy deliberation, which lasted throughout the entire day, from information gained, and from the opinions of the various Councilors, it was decided to suggest the continuation of the Medical Defense. It was further suggested that the plan be made optional, and in as much as the Medical Defense was directly under the control of Council, the Executive Committee of such should consist of three Councilors chosen from that body, by its members. It was therefore decided to amend the By-Laws, relative to Medical Defense, embodying these and other changes, and present them to the House of Delegates for its consideration.

(See Amendments to Medical Defense By-Laws.)

Presented to House of Delegates July 10, 1912, 9 p. m.

Laid over for a day. Presented and re-read July 11, 1912, 9:30 p. m.. Adopted by a majority of the Delegates present at the convention.

JULY 11, 1912.

The various reports from the different districts showed the Association to be in a good condition. This is especially true of the First and Second Districts, and while the Third, Fourth and Fifth Districts show no material gains in membership, the societies in these districts are in a prospeorus and healthy condition.

The Financial Report of the Treasurer, H. G. Nicholson, was examined, audited and found correct. (Signed) Drs. Johnson, Jeffers, Link, Linsz (Chairman).

The Financial Report of the Editor of the Journal, Dr. S. L. Jepson, was examined, audited and found correct. (Signed) Drs. C. D. Jeffers, H. R. Johnson, W. S. Link, H. P. Linsz (Chairman).

The Financial Report of the Secretary, A. P. Butt, was examined, audited and found correct. (Signed) Drs. W. S. Link, C. D. Jeffers, H. R. Johnson, H. P. Linsz (Chairman).

The Report of the Committee on Medical Defense was received, read and filed.

Secretary Butt called the attention of Council to the fact that the Medical Defense Committee was indebted to the Treasury of the Association for an amount advanced for printing, etc. On motion, which carried, it was decided to reimburse the Treasurer of the Association with an amount not exceeding $30.00, out of the Medical Defense Fund to cover this item.

JULY 12, 1912 (10:30 A. M.)

Meeting of Board of Councilors called to order by Dr. H. P. Linsz, Chairman.

Present: Drs. Jeffers, Johnson, Link, Linsz, Oates, McDonald; Councilors, F. L. Hupp, President-elect, A. P. Butt, Secretary.

ELECTION OF OFFICERS.

Dr. H. P. Linsz of Wheeling, W. Va., was unanimously re-elected Chairman for the ensuing year.

Dr. P. A. Haley of Charleston, W. Va., was unanimously re-elected Secretary for the ensuing year.

The following Executive Committee on Medical Defense was elected from Council by that body:

Dr. H. P. Linsz, Chairman, Wheeling, W. Va.
Dr. H. R. Johnson, Fairmont, W. Va.
Dr. W. S Link, Parkersburg, W. Va.

It was moved (L), second (J), and adopted unanimously, that the salary of the Editor of the Journal, Dr. S. L. Jepson, be One Thousand Dollars ($1000.00) for the ensuing year:

That the salary of the Secretary, Dr. A. P. Butt, be total, Three Hundred Dollars ($300.00) for the ensuing year;

That the salary of the Treasurer, Dr. H. C. Nicholson, be One Hundred Dollars ($100.00) for the ensuing year, and

That Twenty-five Dollars be donated to Dr. G. D. Lind for services rendered.

It was decided by Council to employ a stenographere, at our next Annual Meeting, for the purpose of recording the discussions of the various papers, such discussions to be reported in the Journal together with the papers read.

A mid-year meeting of the Board of Councilors was left open as to date, to meet in Parkersburg at the call of the Chairman, if necessary.

Adjourned.

The above report was read before the House of

Delegates, accepted and adopted unanimously, July 12, 1912.

H. P. LINSZ, *Chairman.*
P. A. HALEY, *Secretary.*

The House of Delegates adjourned at 4:01 p. m.

C. O. HENRY, *President.*
A. P. BUTT, *Secretary.*

MEMBERS AND VISITORS IN ATTENDANCE AT THE MEETING.

NAME	RESIDENCE	COUNTY SOCIETY
Wingerter, C. A.	Wheeling	Ohio.
Henry, C. O.	Fairmont	Marion.
Post, W. H.	Masontown	Preston.
Dodrill, J. B.	Webster Springs	Nicholas-Webster.
Judy, W. J.	Webster Springs	Nicholas-Webster.
Woodville, J. B.	Fayette	Fayette.
Strickler, E. W.	Kingwood	Preston.
Allen, S. R.	Webster Springs	Nicholas-Webster.
Langfitt, F. V.	Salem	Harrison.
Green, W. H.	Camden	Lewis-Upshur.
Carter, S. P.	Gauley Bridge	Fayette.
Horgan, E. J.	Jenningstown	Barbour-Randolph-Tucker.
Hopkins, J. W.	Fayetteville	Fayette.
Murphy, F. B.	Philippi	Barbour-Randolph-Tucker.
Perry, O. L.	Elkins	Barbour-Randolph-Tucker.
Moore, S. G.	Elkins	Barbour-Randolph-Tucker.
Shirkey, W. F.	Malden	Kanawha.
Halterman, C. W.	Clarksburg	Harrison.
Dupuy, E. S.	Parral	Fayette.
Linsz, Henri P.	Wheeling	Ohio.
Jeffers, Geo. D.	Parkersburg	Little Kanawha and Ohio Valley.
Camden, Rolla	Parkersburg	Little Kanawha and Ohio Valley.
Link, W. S.	Parkersburg	Little Kanawha and Ohio Valley
Barker, O. D.	Parkersburg	Little Kanawha and Ohio Valley.
Lind, G. D.	Greenwood	Doddridge.
Fawcett, W. P.	Alderson	Greenbrier Valley
McDonald, J. E.	Logan	Logan.
McNeilan, M. M.	Parkersburg	Little Kanawha and Ohio Valley.
Bonar, W. P.	Moundsville	Marshall.
Houston, I. N.	Moundsville	Marshall.
Holland, C. L.	Fairmont	Marion.
Smoot, E. W.	Madison	Boone.
McConihay, J. M.	Charleston	Kanawha.
Shawkey, A. A.	Charleston	Kanawha.
Hupp, Frank L.	Wheeling	Ohio.
Booher, Thornton	Bethany	Brooke.
Oates, T. K.	Martinsburg	Eastern Panhandle.
McQueen, G. A.	Charleston	Kanawha.
Weirich, C. R.	Wellsburg	Brooke.
Rexroad, C. W.	Harrisville	Ritchie.
Dunn, R. H.	Huntington	Cabell.
Pepper, R. H.	Huntington	Cabell.
Bloss, Chas. R.	Huntington	Cabell.
Johnson, H. R.	Fairmont	Marion.
Sloan, H. E.	Clarksburg	Harrison.
Lewis, Geo. E.	Chester	Hancock.
Sharp, W. H.	Parkersburg	Little Kanawha and Ohio Valley.
Powell, R. H.	Grafton	Taylor.
Hood, T. M.	Clarksburg	Harrison.
Nicholson, H. G.	Charleston	Kanawha.
Hoover, M. T.	Palmer	Braxton.
Wehner, E. F.	Clarksburg	Harrison.
Kessler, D. P.	Cowen	NicholasWebster.
Rodgers, G. C.	Elkins	Barbour-Randolph-Tucker.
Butt, A. P.	Davis	Barbour-Randolph-Tucker.
Ogden, C. R.	Clarksburg	Harrison.
Talbott, L. W.	Elkins	Barbour-Randolph-Tucker.
Price, N. R.	Marlinton	Greenbrier.
Osborn, R. L.	Clarksburg	Harrison.
Boso, Fred M.	Weston	Lewis-Upshur.

NAME.	RESIDENCE	COUNTY SOCIETY
Lawson, A. F.	Wildell	Barbour-Randolph-Tucker.
Haynes, H. H.	Clarksburg	Harrison.
Mason, S. M.	Clarksburg	Harrison.
Venning, R. E.	Charlestown	Eastern Panhandle.
Morrison, M. P.	Sutton	Braxton.
Barlow, C. A.	Spencer	Marshall.
Banks, J. W.	Shepherdstown	Eastern Panhandle.
Reger, C. M.	Roanoke	Lewis-Upshur.
Steele, S. M.	Weston	Lewis-Upshur.
Slaughter, H. C.	Winifrede	Kanawha.
Williams, J. F.	Clarksburg	Harrison.
Rogers, J. G.	Smithfield	Ritchie.
Wentz, G. W.	Chester	Hancock.
Jepson, S. L.	Wheeling	Ohio.
Dowler, M. A.	Glen Dale	Marshall.
Campbell, H. P.	Parkersburg	Little Kanawha and Ohio Valley.
Echols, W. E.	Richwood	Nicholas-Webster.
Brooke, J. A.	Crawford	———
Fortney, C. S.	Hundred	Marshall.
Hoffman, C. S.	Keyser	Grant-Hardy-Hampshire-Mineral.
Hudkins, O. L.	Flatwood	Braxton.
Varner, H.	Clarksburg	Harrison.
Kessler, J. C.	Cowen	Nicholas-Webster.
Stroud, C. G.	Erbacon	Nicholas-Webster.
McDonald, J. W.	Fairmont	Marion.
Hatfield, H. D.	Welch	McDowell.
Hicks, C. J.	Welch	McDowell.
Grimm, A. S.	St. Marys	Pleasants.

VISITORS.

Lewellys F. Barker—Baltimore, Md.
S. MacCuen Smith—Philadelphia, Pa.
G. Betton Massey—Philadelphia, Pa.
J. S. Horsley—Richmond, Va.
B. F. Beebe—Cincinnati, O.
Tom A. Williams—Washington, D. C.

Medical Outlook

SUPERVISION OF THE VENEREALLY DISEASED.—G. V. R. MERRILL, (*N. Y. State Journal of Medicine,* March, 1911) discusses this subject intelligently, with many references to the literature. He believes that in orden to obtain the earliest posible results in the endeavor to curtail the extension of gonorrhea and syphilis, two measures should be put into operation at once, namely, compulsory notification to boards of health, under seal, and suitable legislation. Under the latter head he would recommend (a) making it a misdemeanor for druggists or others than licensed physicians to treat or prescribe for these diseases; (b) making it a misdemeanor for any syphilitic or gororrhoeic to cohabit with or expose any other person to the liability of infection, unless pronounced cured by a physician from among such as previously have been designated for that purpose by the State Department of Health; (c) making the wilful transmission of syphilis or gonorrhea, a crime punishable by imprisonment from two to five years, and liability to civil suit for damages by the injured person. —*Med. R. of R.*

HYPEREMIA IN SKIN DISEASES.—From my observations I have formed the opinion that practically all chronic forms of skin diseases are benefitted by the hyperaemic treatment before applying local remedies. The action of ointlarge affected area, and afterwards local to the ments and lotions is considerably facilitated if a local congestion of the part is produced before they are applied. This local hyperaemia probably acts in two ways. In the first place, by producing a passive congestion, it increases the blood-supply, and so improves the nutrition of the part, and at the same time encourages the removal of deleterious products by the venous blood. In the second place, this local hyperaemia assists in the local action of the drugs when they are afterwards applied.

Of the cases so far treated, it would appear that the most satisfactory results have been obtained in psoriasis, especially in some very old-standing cases in which the lesions were very chronic and localized. We so often meet with cases of this complaint of many years' standing where some very persistent lesions are limited to a small area, such as the knees or elbows, and which resist all treatment. This is the class of cases specially benefitted by this method.

Some cases of lupus vulgaris have shown rapid improvement—in fact, from some recent ob-

servations the hyperaemic method showed earlier and much more satisfactory results than the x-rays had done. Acne, both diffuse and local, reacted well, but these cases required a considerably greater amount of congestion and more frequently repeated treatments both general to a individual and more persistent comedones and pustules.

The immediate result of the local treatment is to produce a venous congestion of the skin, which increases the action of the sudoriferous glands, and gives rise to a varying degree of perspiration. This varies with the nature of the lesion and the degree of hyperaemia produced. In some conditions only an almost imperceptible amount of sweating results—perhaps just sufficient to produce a slight haziness on the sides of the cupping glass without a visible sweat on the skin. In others, such as many eczemas and seborrheas, a profuse perspiration is quickly produced, and after a few minutes the whole part is bathed in sweat. In other cases the ordinary sweat is replaced by a serous exudation. In some instances of non-ulcerated lupus, which as a class perspire very freely under the treatment, a blood-stained serum exuded after a short time, and for this reason the cases require to be very carefully treated and only for very short periods at a time, one minute or so being usually sufficient—*Sibley in Am. Jour. of Dermatology.*

POISONING BY VERONAL—S. E. EARP, M.S., M.D., *Editor Indianapolis Med. Journal* reports a case of veronàl poisoning with recovery, in which 100 grains of the drug had been taken at one dose. Patient was sick about 11 days, Temperature ran as high as 104½, unconscious for five days, severe pulmonary symptoms. Strychnine and camphorated oil were given hypodermatically, cold sponging and hypodermoclysis followind by olive oil per stomach. This was evidently a "close call."G. D. L.

LIME-CRUSTED SILK SUTURES IN THE BLADDER, REVEALED BY X-RAY—E. H. SKINNER, M.D., of Kansas City, Mo., reports in *Jour. Mo. State Med. Asso.*, a case in which the X-ray showed a crescentic shadow in the bladder. A perineal incision was made by Dr. J. P. Henderson and a coil of silk suture material crusted with lime salts, removed. About a month previous the patient was operated on for hernia and a wound in the bladder wall. The wound in the bladder had been closed by a silk suture which had sloughed and in three weeks' time had gathered sufficient urinary salts to cast an X-ray shadow. The patient made an uneventful recovery.—G. D. L.

NUTRITIVE ACTION OF CARDIAC TONICS.—"In cases when the nutrition of the heart is failing, drugs which stimulate it to increased action do not act merely temporarily as cardiac stimulants, but they are really at the same time cardiac nutrients. It is because of this fact that the good effects which we see from the use of sthrychnine, digitalis, strophanthus, caffein, etc., in cardiac disease do not cease when the drugs are withdrawn, but may continue and increase, these drugs having given a temporary increase to the power of cardiac muscles which has enabled it to nourish itself more effectively.

G. D. L.

Miscellany

THE DOGS OF THE SANITARY SERVICE.

The use of dogs in the relief of the wounded was recently tried at Vincennes in the course of instruction of the sanitary service of the military government of Paris. Several men who were supposed to be wounded were hidden in various places on the plain. All the pseudo wounded were found in a few minutes. The trial was made as follows: The dog is sent off by his master in a given direction at varioues distances; he aids the wounded takes his kepi and brings it back. The dog leads or, one might say, drags his master immediately to the spot where he found the wounded man without hesitation. In default of the kepi the dog hunts with his paw or his muzzle in the wounded man's pocket and takes his handkerchief, glove or some other object showing the identity of the man.

The importance of the use of such dogs is readily understood. Wounded men exposed for a long time on the field of combat may be exposed to attacks of birds of prey and in our colonial expeditions several have undergone frightful mutilation by the natives. The methods of combat, the arrangement of the troops during battle over a greater or less extent of territory, modern long-range fire-arms, night battles—all make the work of the ambulances very difficult. The number of men who disappear is always large because the relief of the wounded during action becomes constantly more difficult. The wounded who are too weak to call or to leave their shelters are abandoned unless the orderlies are accompanied by dogs who are used in searching for the wounded. It seems, therefore, that it is necessary for modern armies to possess trained dogs in the sanitary service.

CRIMINAL ABORTION.—DR. HARRY GALLAGHER of Glenoiden, Pa., in a paper read before the Delaware Co., Society, says: "It seems to me that the time has come when the Protestant churches should demand of their women the highest moral standard in child-bearing and motherhood, not in a vague, general way, but a clear, concise statement of details, making it as plain as the noonday sun, that criminal abortion is not only such a heinous crime that the law imposes a severe penalty upon conviction, but also that, besides doing away with a human life, the impairment of health, risk of infection and succeeding female weaknesses are a tremendous price to pay for the objection to completing pregnancy."—G. D. L.

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Original Articles

PUBLIC ADDRESS.

The Obligation of the Public to the Medical Research Laboratories.

Frank LeMoyne Hupp, A.M., M.D.,
Wheeling, W. Va.

Delivered to the Public at Annual Meeting State Medical Association, July 10, 1912.

Mr. President, Members of the West Virginia State Medical Association, Ladies and Gentlemen:—

Without parading the shades of Hippocrates, Galen and Celsus or a score of other celebrities before you in their ancient robes, and without reviewing the achievements of twenty centuries of medicine in as many minutes, we will proceed to take up a definite subject with a definite purpose.

While our profession as a body, particularly those of us on the firing line, can testify without reservation, to the monumental benefits to humanity which have arisen from the medical research laboraboratories and their merciful animal experimentation; it is a melancholy but indubitable fact that the lay public has little knowledge of its debt of gratitude to our experimental institutions; notwithstanding the repeated daily demonstrations in the American home of the application of these experiments in the prevention and cure of disease. My friends, we are here tonight to tell you that without this research work, the makers of modern surgery would have had no inspiration, and medical science would be reduced to blind empiricism.

Every well balanced person with a perfectly normal heart, can sing without tiring the long meter doxology when he stops to reflect over his obligation to the medical research laboratory, the glory of its power, the bliss of its growth and the splendor of its achievement. I think we can say without fear of contradiction that there is no field of scientific inquiry from which, in the last sixty years, mankind has received a larger visible, tangible or concrete benefit than from this field of medical research, applied in the science of medicine and surgery, and in sanitary science.

The fruits of the experimental work of Morton, Simpson, Pasteur and Lister gave to the world the corner stones of modern surgery, anaesthesia and antiseptics, and made it possible for the operator to invade the sacred precincts of the temple of life; the abdomen, the brain and the heart, first in the animal then in man, so that today these marvelous advances may justly be regarded as the greatest and most beneficent of human achievements.

Abroad in the land there is a class of dreamers who style themselves the Anti-Vivisection Society and the Society for the Prevention of Abuse in Animal Experimentation, and annually they have caused to be introduced before the law makers, bills maliciously designed to restrict the use of animals in experiments, conducted for medical or other scientific research, and these bills have been ignominiously defeated at each of the last five sessions of

the New York legislature. Annually they make their pilgrimage to the legislative halls where ruthlessly and with hearts of ice they lend a deaf ear to the cries of thousands of suffering humanity in their mad effort to shackle the hands of scientists, and thus stop the battle now being waged against disease.

That the proposed legislation put forth by these anti-vivisectionists is absolutely unnecessary for the protection of animals undergoing scientific experimentation is very manifest, for the New York penal law, which is wisely and comprehensively drawn, covers all forms of cruelty to animals whether inflicted by experimenters or others.

This law has been invoked time and again successfully in court against cruelty perpetrated in the name of science.

A lot of very good and otherwise well balanced people have lent their names and aided by contribution of money to the support of this nefarious agitation, simply because they have been misled as to the true state of affairs by the mischievous and misleading literature widely circulated.

The very best lay press of this country, to say nothing of the journals of medicine, have repeatedly pointed out these flagrant misrepresentations and untruths, yet in their fanatical delirium these opponents of progress have neither retracted nor modified their insane claptrap. Their heart-rending appeal is for the "open door" in all laboratories, implying of course, the impossibility of forcing an entrance at the heavy iron gates of these "temples of torment."

I would have you know, good people of this commonwealth, that there is no such thing as a closed door in any research laboratory. Any qualified person in pursuit of legitimate information can gain ready access to these experimental institutions.

These people would exact tribute of science and humanity by their rash effort at prohibitive legislation, as mercilessly as did the robber barons of the middle ages.

Can you imagine for one minute any well balanced person in this twentieth century disputing the germ theory of disease? Yet, one of the real purposes of the feminine leaders of the anti-vivisection crusade is to discredit this basic principle of modern medicine. Hear, if you please, this incoherent bit of mental frenzy which eminated from the President of the New York Anti-Vivisection Society, and think of it, she went all the way to London to get it out of her system:

"What is the way of salvation? It seems to me that the only real way to freedom, not only for the sub-human but for the human as well, lies in getting away from the unfortunate and mistaken idea of the germ theory of disease, with its filthy inoculations of poisons into healthy blood and tissue. Fundamentally, I believe our work and our battle are there.

"The insanity of serum therapy is increasing so rapidly that soon no one will be safe from the infection of any and every kind of disease; the blood of the children will be impure from the hour of their birth, and a certain sure retrogression of the race is bound to follow since all these results from serum therapy are cumulative, . . . and we have reached the natural but inevitable result of blood pollution by serum therapy, that is, a degenerated race."

Did you ever hear of anything so absurd?

Here is another delightful brain storm from the lips of that English rhapsodist, Stephen Coleridge.

"I am a believer in the abolition of vivisection in the sense that total abolition would be the best means of putting an end to the torture of animals."

Other adherents of these societies have expressed themselves, with equal emphasis. Certainly it must be apparent to you all that any legislation can only be regarded as dangerous and a blow directed to the life and progress of medical science, and an entering wedge of a movement, which has for its ultimate purpose the abolition by law of all scientific experiments, however mercifully conducted, upon living animals.

The accomplishment of this purpose, as has been clearly set forth by the Committee on Experimental Medicine of the Medical Society of the State of New York, would put an end to medical research in the field in which practically all of its most notable advances for the past fifty years have been made. It seems idle to defend animal experimentation as a means of adding to medical knowledge and curative possibili-

ties. It should be sufficient to point out that the great discoveries which have made it possible to control and gradually reduce the ravages of some of the most dreaded diseases, have been based upon knowledge derived from animal experimentation.

Their charges of unwarranted cruelties deliberately inflcted on animals by scientifice experimenters are as basely false as they are preposterous. Their sentimental and exaggerated statements are most sweeping and no authentic case substantiating their reasonless claims has been brought forward in support of these assertions in recent years.

I have personally seen the work of that matchless and unassuming operator, Dr. Alexis Carrel, at the Rockefeller Institute. I stood beside him in April of this year as he deftly united the severed tube, inconceivably small, leading from the kidney to the bladder, calling into play a needle and silk as fine as human hair, and I marvelled as this wizard of science completed, in a minute or two, his merciful task, developing as he did a technique beautiful in its detail and simplicity.

Every precaution was observed as to asepticism and the care in administering the ether, as well as to the after treatment, indeed every step was as painstaking as one would observe in the best hospitals of the land.

There is a tendency abroad in the land today that ought to be stopped, and this can only be accomplished through the teaching of the public by medical men. It is due to a desire on the part of the narrow-minded anti-vivisectionists to be clever at the expense of truth.

Let us be thankful that it is only a minority of the self-styled humanitarians, who for convenience might be sub-classified as hysterical faddists, who will read the distorted misrepresentations of some misguided editor or the imbecilic twaddle and tomfoolery appearing under the cartoons of Life. These same people will not take the trouble to read the reports of the Rockefeller Institute or the words of wisdom from the pen of a Welch, a Ewing, or a Flexner. They will read an attack on animal experimentation with vast pleasure and with a sense of their own keen acumen, before they have even compared the mortality statistics of diphtheria, tetanus or spinal meningitis of today, with the days before the serum for these diseases was given to the world. These self-annointed humanitarians can speak glibly enough to the ignorant or to those who steal wisdom at second-hand like themselves, but no sane estimate of the tremendous value of the experimental laboratory based on either observation or reading can be given.

Something may be said regarding the ethics of animal experimentation. Certainly we will agree with the philosopher of Columbia University, Prof. John Dewey, when he makes the statement that cruelty and the wanton and needless infliction of suffering upon any sentient creature is unquestionably wrong. There is, however, no ethical justification for the assumption that experimentation upon animals, even when it involves some pain, or entails, as is more common, death without pain (since the animals are still under the influence of anaesthetics), is a species of cruelty.

If you have read the literature or have heard the hysterical speeches, or if you have attended any of the misleading and grossly exaggerated exhibits all directed against animal experimentation, you will recognize with Prof. Dewey that it is constantly assumed that the object of animal experimentation is a selfish willingness to inflict physical pain upon others simply to save physical pain to ourselves. On the moral side, the whole question is argued as if it were merely a balancing of physical pain to humans and to animals over against each other. If it were such a question, the mapority would probably decide that the claims of human suffering took precedence over that of animals; but a minority would doubtless take the opposite view, and the issue would be, so far, inconclusive. But this is not the question. Instead of being the question of animal physical pain against human physical pain, it is the question of a certain amount of physical suffering to animals (reduced in extent to minimum by the precautions of anaesthia, asepsis and skill) against the bonds and relations which hold people together in society, against the conditions of social vigor and vitality, against the deepest of shocks and interferences to human love and service. No one

who has faced this issue can be in doubt where the moral right and wrong lie. To prefer the claims of physical sensations of animals to the prevention of death and the cure of diseases, (probably the greatest sources of poverty, distress and inefficiency, and certainly the greatest source of moral sufferings), does not rise even to the level of sentimentalism.

It is accordingly the duty of scientific men to use animal experimentation as an instrument in the promotion of social well being; and it is the duty of the general public to protect these men from attacks that hamper their work; it is the duty of the general public to sustain them in their endeavors. For physicians and scientific men—though having their individual failings and fallibilities, like other folks, are in this matter acting as ministers and ambassadors of the public weal.

Exaggerated statements, repetition of allegations of cruelty which have never been proved or even examined, use of sporadic cases of cruelty to animals in Europe a generation or two ago as if they were typical of the practice in the United States today, refusal to accept the testimony of reputable scientific men regarding either their own procedure or the benefits that have accrued to humanity and to the brute kingdom itself, from animal experimentation, uncharitable judgment varying from vague insinuation to downright aspersion —these things certainly have an ethical aspect which must be taken into account by unbiased men and women desirous that right and justice shall prevail. (Dewey).

It is also a fair requirement that some kind of perspective and proportion shall be maintained in moral judgments.

This state of affairs is serious and should be squarely faced. I believe in the scriptural truth, "Ye are of more value than many sparrows," and I furthermore believe that the children, yours and mine, who have been saved from suffocation by diphtheria, are worth a thousand time more than all the animals which have served to bring to men the knowledge of antitoxin. In the city of New York alone, the reduction in this diphtheria mortality since the introduction of antitoxin has been 80%, in other words it means that 50,000 lives have been saved in this one city. Think of this. No step in this whole investigation could have been made without the use of animals.

If all injury and destruction of animal life is insanely claimed as immoral by the anti-vivisectionists, why, oh why, in the name of God and humanity, do they single out as the object of their attack the relatively few animals employed in the research laboratories?

Listen—*They bridle the horse with a stiff bit and with lash and spur, force him unwillingly to do their bidding; they tear the calf from the mother cow, brain the infant animal with an ax and complacently eat the veal for their breakfasts, while their children fatten on the stolen milk. They permit the dehorning of cattle and their branding with hot irons. They urge no protest against the most shocking barnyard operations, performed merely to make more palatable the meat they eat.

They permit without murmur, the annual murder of 50,000,000 beeves, sheep and hogs and also 250,000,000 chickens, turkeys and geese. They peacefully slumber with their heads pillowed on the feathers plucked from the breast of the bleeding geese. No word of protest comes from these humanitarians, when 400,000 dogs and cats are annually strangled to death in nineteen of the large cities of the United States, because forsooth they are innocently wandering the streets unmarked and unloved.

Is it reason, is it law, is it humanity? Neither the human heart nor the human understanding should bear a perversion so monstrous and absurd.

In the name of right and reason, justice and humanity permit me to ask you tonight, who are the merciful people? The few physicians who superintend the making of the antitoxin, which cures diphtheria, cerebro-spinal meningitis, and lock jaw? The scientific men, who mercifully conducted the experimental research which stamped yellow fever out of North America, or the hysterical fanatics who cry out agaist the infliction of any suffering on animals. These same women, God forgive them, will ornament their Easter bonnets with aigrettes from the innocent white heron, plucked and thus killed while nursing

*See Cannon—*New York State Journal of Medicine*, Vol. 12, No. page 220.

her young, or with a wing from the mother pigeon of St. Maurice, beautiful birds now almost exterminated, because, forsooth, of the greedy demand for their god-given plumage.

Did these same people ever stop to reflect that there is more suffering inflicted upon animals in a single day in a single slaughter house where the meat for their dinner is prepared than in a year or years, in all the scientific laboratories for experimental research in the United States?

Let the opponents of animal experimentation deny themselves all food which has been purchased by animal death and suffering; let them refrain from wearing furs and the fur-lined coat, collared with an astrakhan pelt, ruthlessly torn from the warm body of the innocent lamb before its natural birth, and feathers which have been obtained by slaughter and cruelty; let them go barefooted rather than put leather on their feet; let them linger in the clutch of painful disease rather than take advantage of a cure that has been born of experiments on others, and then they may have a right to be heard. But to make use of all these things, and to drive to their meetings with elegant equipage drawn by horses whose tails have been chopped off about six inches from their bodies, all for their own satisfaction and then to soothe their conscience by an advocacy of prohibitory legislation for the research laboratory, is the resort of persons lacking in the courage of their convictions and betraying their ignorance of nature and nature's laws.

To my thinking these unthinking advocates are really cruel to their own race. How many cats or guinea pigs would you or I sacrifice to save the life of our child choking to death with a membranous croup, or shrieking and deliriously tossing its little life against that impregnable rock of spinal meningitis—or how many monkeys would you exchange to rescue the reason, the sight, or the hearing, of an infant convalescing from this same cruel juggernaut?

The world admires courage, but no man can claim that admiration who desires to secure the benefits that have come from the labors of others, and at the same time cries out against the means used for the acquisition of those results.

These soul crushed, and worse than crucified mothers, bearing close to their hearts, their terrified children have been driven by a hundred painful diseases out into the relentless night of despair, only mocked, jeered and unaided by fanatical and inhumane dreamers. But thanks be to Almighty God, a refuge and sheltering arm has been provided by the medical research laboratory.

Did some one of you ask how was it before the creation of these institutions, before Rockefeller and others laid their gifts upon the altar of science? Let me tell you :

"A day passed, and another came and passed
The third, with dirges due, in sad array,
Slow through the church-way path they saw him borne."

Now one word regarding the influence of anti-vivisection on character.

Prof. Keen, of Philadelphia, delivered an address less than four months ago in Boston, to illustrate how the most violent, vindictive and vituperative, passions have been aroused and fostered, especially by the women—the very flower of our modern civilization, as Prof. Keen, styles them, I will read a copy of the letter received and read by the Philadelphia surgeon at the beginning of his address:

> "Arch-Fiend: I read with horror your article in the Ladies' Home Journal on vivisection. I hope your mother, if she is living, will die in the most terrible torture, and if she is dead that her soul will never know rest for having given life to such a vile monster as you, is the nightly prayer of a dozen women who indited this."

Prof. Keen has received many such letters and has been willing to accept the supposition of unbalanced minds as an explanation and palliation for their writing. They are on a par, however, with the literature which is daily issued from their various headquarters, teeming with violence and vindictiveness and embellished with antiquated and misleading pictures.

Certainly a freezing torpor has crept over the affections and has tranformed the finer

sensibilitits and has deadened the heart of one who would so write. Reason, imagination and judgment are hurled from their equipoise, and the very soul of such a dreamer, disenthralled as if by some subtle but fatal impetus is hurled into the vacuity of despair. Charity would fain throw over this pseudo-penitent, misdirected, sanguino-bilious victim, her broad mantle.

Well might myriads of little children, and their elders too, whose golden chord has been loosed because of preventable disease, away off there in the abode of the saints, well may they breathe a prayer to Almighty God, using the gentle and forgiving words of the Lowly Nazarine: "God forgive them for they know not what they do." If we permit people of this type and periodicals thirsting for sensationalism to so poison the minds of the common people and open not our mouths, we demonstrate either that we are faint at heart or dull of conscience.

Let us give ear to the Genesis of the Holy Writ, the First Chapter and the Twenty-sixth Verse:

> "And God said, let us make man in our own image, after our likeness; and let him have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth."

The Pharisee thanked God he was not as the Publican, but it is not in this spirit that we should be thankful that we are not of Hindu birth, where twice as many millions of people as there are on the American continent, who hold that there is no justification whatever to destroy animal life for any purpose.

Dominion over the animate creation, as President Schurman, of Cornell, has put it, means, of course, the right of man to use animals for his good, animals for experimentation, scientifically conducted by experts whose conscience and hearts are as big as their desire to help their brother man—aiming only to discover means that may annihilate disease, prolong life or establish immunity.

God knows, yes, and we all know that the man or woman who will attempt to thwart or oppose this beneficent work, a work in itself which is a basic postulate of our civilization and morality is either a misguided sentimentalist or an unthinking enemy of his own species.

Such work, my friends, is not only morally justifiable but morally obligatory on those experts who are qualified for that high and beneficent duty.

To those within my hearing outside of the medical profession, permit me to say without boast or egotism, that if there is any class of men in the world which has been schooled in things humane, it is the true followers of Aesculapius, daily witnessing as they do the cruel ravages of disease and the heart-wrenching agonies of the death chamber, moving almost hourly amidst the suffering and sorrow of their fellow men, tireless in their search for new weapons.

Verily to workers such as these might well be trusted the subject of animal experimentation and the supervision of the research laboratory.

"To men who have influenced the profession by exemplifying those graces of life and refinements of heart which make up character."

As Prof. Schurman has well said: "The human sufferings which the physicians see are not exploited in the daily press, they are so common and so well known that they do not lend themselves to sensational stories. On the other hand gruesome stories of the sufferings of animals, kept for the research laboratories, can be evolved out of their imaginings by the reporters of sensational newspapers, by people who never see these animals and who know nothing of the tender care they receive or the uses to which they are put."

In Prof. Osler's farewell address to American and Canadian students a beautiful thought is presented on mind blindness: "Only by keeping the mind plastic and receptive does the student escape perdition.

It is not, as Charles Lamb remarks, that some people do not know what to do with truth when it is offered to them, but the tragic fate is to reach, after years of patient search, a condition of mind-blindness, in which the truth is not recognized though it stares you in the face.

This can never happen to a man who has followed step by step the growth of a

truth, and who knows the painful phases of its evolution. It is one of the great tragedies of life that every truth has to struggle to acceptance against honest but mind-blind students.

Harvey knew his contemporaries well, and for twelve successive years demonstrated the circulation of the blood before daring to publish the facts on which the truth was based."

Perhaps some day we may hope to see these offenders against science healed of their mind-blindness, perhaps some skilled operator may remove the dense cataract of fanaticism, that these misguided people may be brought to light and become familiar with the merciful methods by which advances in knowledge are made, and bring themselves to wander through the hospital laboratories over the paths the great masters have passed, and see the quality of thoroughness, truth and mercy that dwell therein.

Some one has ventured the statement that animal experimentation tends to lower the sensibilities of those who do the work and thereby becomes a deterrent factor in social civilization. This is a subtle concept and is well answered by Dr. Clover, of St. Luke's Hospital, when he says: "True sympathy and altruism must be kept distinctly separate from foolish sentimentalism."

There is not the slightest evidence any where that animal experimentation has had such effect. Do the names of Jenner, Pasteur, or Koch stand for mercy or do they stand for brutality? Have Ehrlich, Crile, Flexner and Carrell weakened the social structure of civilization? It is worse than mind-blindness to refuse to see the good that has arisen from the work of these men and other kindred spirits living and dead.

If the opponents of animal experimentation were to assume the right of censorship over physiological publications, and a conscientious censor would erase from the textbook of physiology everything that is based on the knowledge gained through animal experiments, the result would indeed furnish a unique copy: "One-half of the contents would completely disappear, and the other would have become for the most part unintelligible." This acknowledgement of how much physiology owes to the experimental laboratory is given in the words of that eminent investigator, Prof Rudolph Heidenhain, and it applies with equal emphasis to the other branches of medical science.

The Sense of Pain in Man and the Lower Animals.

Prof. Frederich S. Lee, Dalton Professor of Physiology in Columbia University, has taught us that the brain is the actual seat of painful sensations. A nervous impulse can be felt as pain only when it reaches and puts into activity certain brain centres. Without such activity all of the rest of the pain mechanism is accompanied by no painful feelings whatever. The sense of pain is therefore, to be regarded as one of the special senses, like sight or hearing, and is not a mysterious phenomenon of general sensibility.

Those of you who heard Criles' wonderful paper on the results of operations performed on the principle of anoci-association at the recent meeting of the American Medical Association, will remember well how he has developed a special technic particularly in abdominal operations and the operation for Graves disease, creating as it does a neutral state which he has designated anoci-association. This technic cuts off the brain and eliminates absolutely all pain and mental shock and so reduces the general mortality and diminishes the post operative impairment.

The surgeons within my hearing can readily understand the potency of imagination and memory in the production of pain. Its anticipation, preliminary imaginings of its suffering, the remembrance of past pains, the focusing of the attention on the present ordeal, the uncertainty as to its future course and its ultimate outcome, and general anxiety for oneself and others, all these may be added to the simple sensation and the result is a mixture of painful sensations of the intensity out of all proportions to the actual pain itself.

Pain is felt most acutely by civilized men. Savages are noted for the bluntness of their sensations and as Lee has pointed out that innumerable facts of animal experience testify to the comparative indifference of animals, the habitual apathy even of domestic animals, to happenings that might

be accomplished by intense sufferings in human beings.

Remember, all this does not in the slightest degree justify the wanton infliction of needless suffering, far from it, and God forbid; but it does bid us to temper our uncalled for emotion and hysteria; it calls us as a profession to teach these facts to the layman that he may know that the amount of pain in animal experimentation is grossly exaggerated

Teach them something of that other picture—the onward march of disease and its direful consequences, the increase enormously of human misery and suffering, if such experimentation were seriously restricted.

A fight is going on against the gipsy moth, the hook worm and other well-meaning inhabitants of the globe. Collier's Weekly suggests that bills be introduced by humanitarians into all legislatures to protect these guiltless creatures. Those of you who attended the scientific exhibit of the American Medical Association, at Los Angeles, witnessed the unpopularity of the rat, the carrier of the bubonic plague. Centainly with Collier's, we believe a society for the protection of rodents should be organized with Carolyne White, or Diana Belais at its head—for verily these four-footed sufferers, the rats I mean, are being slaughtered by the millions on the Pacific coast.

Some scientist, dairyman or veterinarian has pointed out that one further step in sentimental absurdity would bring us to this proposition:

"It was nature's desire that the lacteal fluid of the cow should go to nourish her own offspring, but in brutal violation of the cow's tenderest maternal instincts, men wean the calf and give the milk to children." This outrage should be stopped.

The Fruits of the Laboratories.

If you will bear with me, I will exhibit for your consideartion some of the priceless gifts of the laboratories. Your heritage, my friends, and they call for the exercise of far higher faculties of description and imagination than I am able to give them.

Vaccination stands out pre-eminently as the very first marked achievement resulting from a combined study of diseases in animals and man, as a protection against small-pox.

In 1798, Jenner observed that persons who had come in contact with cattle suffering from a disease called cow-pox were thereafter immune to that most destructive and appalling scourge of small-pox. In order that we may more adequately realize the vast significance of this first fruits of animal experimentation, let us for a moment look at the figures.

Careful records give documentary evidence that "In twenty-eight years before vaccination in Sweden there died each year from small-pox out of each 1,000,000 of population, 2,050 persons; during the forty years following vaccination, out of each 1,000,000 of population the small-pox deaths annually averaged 158.*

†The mean number of deaths from small-pox per 1,000,000 inhabitants for twenty years 1880-1899) was: In the German Empire, with compulsory, vaccination and revaccination, 1.8; in Belgium and Spain, without compulsory vaccination, respectively 206 and 605. In the Prussian army there has *not been a single death* from small-pox since the vaccination law was first enforced in 1874.

‡In the seven provinces of the Philippine Islands there has been for a number of years an annual mortality from small-pox of more than 6,000—indicating about 25,000 cases. In the twelve months following the completion of vaccination in the seven provinces there was not reported one death from the disease.

Diphtheria.

The brilliant research work which has brought to mankind the vaccines, antitoxines and curative sera of various kinds, has astonished the world and called forth the everlasting gratitude of humanity.

Those of us who practiced before this new dispensation or who were privileged to follow our fathers on the toilsome round, will well remember the thrill of horror

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*J. F. Schamberg, *Jour. Am. Med. Asso.*, 1909, lii., p. 69.

†S. W. Abbott, Buck's Handbook of the Medical Sciences, 1904, viii, pp. 126, 130.

‡Annual Report of the Bureau of Health for the Philippine Islands, 1907, p. 20.

that went through the household when the family physician made the diagnosis of diphtheria, and of the almost helpless attitude of the doctor who could do no better than promise recovery in fifty per cent of these cases.

Dr. Park of the New York City Board of Health has reported that in 1893 the death rate from diphtheria in nineteen large cities of the world was slightly over 80 per 100,000 population; in 1895 when the antitoxin treatment was introduced, the rate began to drop in almost every city; and in 1907 the rate had fallen from 80 per 100,000 of 1895 to 17 per 100,000. These facts as Robinson has observed only the hopelessly strabismic or viciously pervert will dare to question or assail.

The story of the conquest of lockjaw is no less of a triumph than that of diphtheria. Today the child with a palmar laceration the result of a Fourth of July that was not safe and sane, and the rusty nail puncture of the foot, is spared that agonizing death by the early use of the serum.

Cerebro-spinal meningitis is another disease which formerly decimated the nursery, the patient writhing in agony while its precious little soul was twisted from its body; and failing in this the disease left its victim a misshapen object of pity with intellect wrecked and dethroned. Thank God, the medical research laboratory with its tireless workers, has shorn this disease too, of its horror.

While the germ causing this disease was found by Weichelbaum in 1887, the serum for its effective cure was not found until twenty years later by Simon Flexner in the Rockefeller Institute.

Cancer.

The past five years has witnessed unceasing toil in the research laboratories for the suppression of cancer, a cure for which mankind is urgently calling, because 75,000 fall victims to it annually in the United States.

The hopeless impenetrable gloom and chaos of twelve years ago through the patient work at the various laboratories has given away to hope and promise. God only knows what the next decade has in store for these unfortunates.

That wizard of the van-guard Ehrlich, in this research work has said with no uncertain voice that the beginning of the end of the cancer problem is in sight.

The good Lord only knows how long that end may be delayed, but certainly with Ewing, we may say, that much depends on the attitude of the public toward the experimental method in medical and biological research.

Since the systematic employment of animal experimentation in cancer research has been endorsed by the leading scientific bodies in every civilized nation, those who are engaged in this laudable work here in America look forward with confidence to the hearty and continuous moral support of every sane and intelligent person.

Tuberculosis and The Experimental Laboratory.

No higher authority on the subject of the great white plague lives today—no man, unless it be Koch, is entitled to higher praise because of his tireless and painstaking observations than Edward L. Trudeau, founder and director of the Adirondack Cottage Sanitarium.

Trudeau has said "that everything that has a direct bearing on the prevention of tuberculosis, everything that has changed mankind's attitude towards it from one of apathy and hopelessness, when the infectious agent which produces tuberculosis was unknown and the disease was thought to be inherited and always fatal, to the growing hope of its ultimate conquest, a hope which has resulted in the great anti-tuberculosis crusade spreading over the world, we owe to animal experimentation."

Dr. Trudeau has no hesitation in saying that if it were not for the knowledge which science has won by animal experimentation in the field of this disease in the last twenty-five years, we should still be plunged in the apathy of ignorance and despair towards it which formerly prevailed and tuberculosis would still be exacting its pitiless toll, unheeded and unhindered.

Those who in their blind ignorance or through false sentiment are trying by legislative interference to stop or restrict animal experimentation do not as we doctors do, have to witness daily the ravages of this terrible disease claiming a victim every

twenty seconds, and live in the midst of the suffering and sorrow which follow in its wake; they seem to be content that all this should continue indefinitely so long as they are not brought into contact with it.

The new knowledge of tuberculosis, of such overwhelming importance to the human race, a knowledge which already gives assurance that generations to come will not die of this disease to the extent that former generations have died, has been won in recent years by animal experimentation. For all this is the death of any number of guinea pigs and rabbits too high a price to pay? Are we to stop on the threshold of this newly acquired knowledge, and are the fruits of ultimate victory to be denied to humanity? My friends, the Titanic disaster was bad enough, but it was small compared with the annual loss of life from this one preventable disease.

To those of you who tramp through these Allegheny Mountain forests it will be a comfort to know that an antitoxin has been found to combat the deadly venom of the rattle snake.

Still more curious is the recently exploited remedy for the strange and much dreaded goitre. While the surgeon's knife has accomplished wonders in the relief of hyperthyroidism, the consensus of opinion today seems to favor the belief that this malady will some day belong to the internist, that the experimental laboratory will definitely solve this problem and furnish a curative serum, as it has already attempted, from the thyroidectomized goat.

Somewhere in the writing of the Edinburgh Obstetrician Saleeby, it has been suggested that it does not occur to the public to look upon childbirth as the equivalent of a surgical operation; yet in all essentials it is so, and there are great and growing reasons why we should look upon the service of Listerism to motherhood, as transcending all else. The maternity hospital which was regarded as a vestibule of death 40 years ago, today is a haven of rest and relief.

Like erysipelas and other virulent wound infection three times the scientific world was warned of the contagious character of this curse to motherhood, by Gordon in 1792, by Oliver Wendell Holmes in 1843 and by Semmelweis in 1847, and each time the warning was pushed aside until Pasteur's patient detective work uncovered the streptococcus, with blood-stained hands and ever after, this germ stood convicted before the bar of science.

Yellow Fever.

It was my great privilege to represent this West Virginia Medical Association as a delegate to the Pan American Medical Congress held in Havana, Cuba, in the winter of 1902. I heard the epoch making papers of Walter Reed, James Carroll and Carlos Finley, on the etiology of yellow fever.

The story of that meeting, the visit to Camp Lazear, the startling scientific developments regarding this yellow scourge, the tales of heroism and self sacrifice would occupy a whole evening.

I wish I were able to paint the picture as I saw it and then let you good people decide whether or not these patient and merciful laboratory workers are the "arch fiends, the devils incarnate and the grim tormentors" as charged by the anti-vivisectionists.

Yellow fever has tortured and killed its victims by the hundreds of thousands, 5,000 fell in the city of Memphis in one epidemic. The death toll for Rio de Janeiro has been 25,000, and upward of 36,000 for the city of Havana.

To save this great slaughter of humanity these so-called "impious experimentors and makers of Hell at close range," suffered themselves to sleep in a stfling atmosphere and in beds in which yellow fever patients had died, and clad in the befouled linen, in their effort to prove a principle. One step more was requisite and a band of God's noble men from our American army headed by Carroll, Reed and Lazear took that step and permitted themselves to be bitten by the infected mosquito. Several lost their lives including Lazear, but the etiology of "yellow jack" was established.

The Panama Canal was made possible and tens of thousands of lives saved in our Southern states and Cuba alone.

The bronze tablet in the wall of the Johns Hopkins hospital, to the memory of Jesse W. Lazear, records that "With more than courage and the devotion of the soldier, he risked and lost his life to show how

a fearful pestilense is communicated and how its ravages may be prevented."

Let us contrast with Prof. Keen, this service to humanity with a cruel and heartless letter written by a woman for the New York Herald of August, 2, 1909. Listen: "Science is based upon such firm foundations indeed, that it can at a moment's notice be tumbled down and become a wrecked mass by a mosquito. Not only this, but these life long vivisectors could not even prolong their own lives. Undone by a mosquito! I shall always have unbounded admiration for that clever insect." May God have pity on the woman who uttered this sentence.

Vaccination Against Typhoid Fever.

A paper bearing this title would be incomplete if it omitted the mention of vaccination against typhoid fever.

During the war with Spain, almost one-fifth of our American army had typhoid fever, to be exact there were 20,738 cases with 1,580 deaths. It was shocking to relate, but nevertheless true this disease caused 86% of the entire mortality of that war! Because of the very general anti-typhoid vaccination, there was not a single case of typhoid reported among our soldiers at the recent encampment of the American army on the Mexican border, and in Cuba.

Should hostilities develop demanding active war conditions our soldiers will be spared the typhoid sacrifice, because of the work of the research laboratory.

Syphilis.

A few years ago it was considered worse than bad form for the subject of syphilis to be mentioned before a lay audience, but thanks to the Council on Health and Public Instruction of our parent society, the American Medical Association, the public has been awakened and educated.

"For centuries this 'Black Peril' has caused untold misery to humanity, in its protean and universal manifestation it has no equal. Present in every clime it mows down annually its victims by the tens of thousands, it attacks every organ and tissue of the body; it spare neither king nor peasant, millionaire or wage slave, inflicting its horrors on guilty and innocent alike."—(Robinson).

Responsible for 42% of the miscarriages, in its hereditary form it bears a mortality of 86%.

20,000 children die annually in France from this disease. In Russia it is so common that whole villages are infected.

Thanks to the patient toilers in the laboratories the germ of this social scourge was discovered about six years ago by Schaudinn, and it was called the *spirochaeta pallida*. Next came a reaction bearing the name of its discoverer, Wasserman, that enables us to tell when the germ has disappeared from the blood and now we possess a most powerful and curative weapon in 606 or salvarsan. All honor to Paul Ehrlich, who found the remedy, he stands out pre-eminently as the presiding genius over the chemotherapeutics of this field of medicine, from its inception and through its rapid and remarkable development.

Would that the time were mine and you had the patience to hear of other formidable diseases which have been brought under better control through the results of medical research; but we hurry on to a brief description of a few of the institutions.

Medical Research Institutions.

The German government founded in 1880, an Imperial Health Office in Berlin with its laboratories of hygiene and pathology, and to the directorship of this institution Robert Koch was called. The genius of this man exhibited in his untiring research work, along the lines of anthrax, tuberculosis, typhoid, diphtheria and cholera, need not be recited to an American audience.

In Paris there was founded in 1886, the Pasteur Institute, as a tribute to the genius of that lovable character, Louis Pasteur, pronounced by Prof. Welch, one of the greatest benefactors of his kind the world has known. His revelation of the world of microscopic organisms and their relation to fermentation and putrefaction, leading to Listerian surgery, the method of active immunization by the use of living parasites, and his successful method of protective inoculation against hydrophobia, are subjects for an evening's consideration.

The Imperial Institute for Experimental

Medicine in St. Petersburg, pronounced by Prof. Welch as of even wider scope than the Paris institution, was founded and endowed by Prince Alexander in 1890.

The Institute for Infectious Diseases, was founded by the Prussian government in 1891; this and Ehrlich's Institute for Experimental Therapeutics in Frankfort are unsurpassed in their scientific activities.

London may well boast of the British, the Jenner and the Lister Institutes of Preventive Medicine founded in 1891.

Chicago has her McCormick Memorial Institute for Infectious Diseases presided over by the ingenious Hektoen, and founded in 1901.

The Quaker City may well be proud of the Henry Phipps Institute for the Study and Prevention of the great white plague, munificently founded in 1903.

In Washington, the Carnegie Institute for biological and chemical investigation is in full blast with an endowment of $10,000,000.

In Japan in the City of Tokio, there is the Institute for Infectious Diseases, and in this laboratory many material additions have been made to medical knowledge.

The Rockefeller Institute.

Early in the month of May, 1901, five of the most dintinguished men of science in America gathered together in the Arlington hotel in Washington, at the suggestion of John D. Rockefeller, to consider the question of the establishment of an institution to promote research work in medicine, with special reference to the prevention and treatment of disease. Dr. Luther Emmett Holt was one of the five, and he writes "Never was the suggestion more warmly welcomed nor an offer more heartily apprciated by the profession and the medical press from one end of the country to the other."

Two others were added to this group of five, a few weeks later, and on June 14, 1901 an institution was formally incorporated as the Rockefeller Institute for Medical Research with the seven men referred to as its board of directors. They were: William H. Welch, T. Mitchel Prudden, Christian A. Herter, Theobald Smith, Hermann M. Biggs, Simon Flexner and L. Emmett Holt.

John D. Rockefeller had placed at the disposal of these men for preliminary work the sum of $200,000, but since then he has added to their holdings until today they have received the princely sum of $8,000,000.

This institution is incorporated under the laws of the State of New York, and occupies an unbroken strip of land from 64th street to 67th street along the East river cliff a total of nearly four acres. A large farm in New Jersey is also a part of their property, recently acquired as a place for the breeding and care of laboratory animals and the supply of farm products.

The Institute is composed at present of laboratories and hospital. This division, as announced in their year book, corresponds with a natural division of medical research into two branches, the first dealing with the problems of human disease in their pathological or physiological aspects and admitting the fullest use of the experimental method; the second studying disease as it actually appears in human beings under conditions equally favorable to treatment and to scientific observation. A common motive actuates the Institute as a whole, namely that of advancing knowledge and of securing more perfect means of preventing and healing disease.

Time will forbid a description of this wonderful plant, but in passing let me urge every physician within my hearing to make it his duty to visit the Rockefeller Institute and there witness for himself the skillful and far reaching experimental work now being conducted in surgery, pathology, bacteriology, chemistry and physiology, see for yourself how this great and good Institution from three points of view, the philanthropic, the educational and the scientific is teaching the highest ideals in medical thought.

Dr. Carrel has successfully demonstrated the possibility of transplanting the kidney of one animal into the body of another and have that kidney functionate normally. He has opened both sides of the chest, displaced the heart and lungs, exposed and divided the aorta between clamps, performed a tedious operation on this most important tube, united its cut ends, replaced heart and lungs and closed the wound and after this, there was no evi-

dence of suffering and a complete recovery of the animal.

He has transposed from one animal to another by amputation, the entire leg suturing muscle to muscle, vessel to vessel and nerve to nerve, and has seen the leg bear its new burden and functionate naturally.

Hendrick tells the story of a pious saint who received, as a special favor from heaven, the healthy leg of a negro in place of his own diseased member, and comments, that as a result of the experiments conducted in the last five years by Dr. Carrel, it seems possible that what was a miracle in an age of faith may become the reality of an age of science.

When we visited the Rockefeller Institute in April to gather material for this paper, Dr. Carrel exhibited his remarkable assortment of arteries and veins, kept in cold storage for months and at his convenience sutured them into living animals with immediate resumption of their blood carrying function.

We watched with wonder the growth of body cells beneath the microscope and stood dazed and bewildered as Carrel told how the human heart had been removed from the body thirty hours after death and made to beat again.

The work of Carrel on blood vessel sutures in the Rockefeller Institute gave to the world the first rational technic for direct blood transfusion, and this gift to humanity has not only saved many hundreds of lives, but has called back the heart which was still in death, to activity and life.

There is no "Torture chamber" in this great Institution, my friends, these animals know their master's voice, and one can hear a chorus of joyous barks as the gentle Carrel moves in and out among the dogs and other animals.

The authorities of the Institute believe that the use of animals for the purpose of advancing the knowledge of disease, its prevention and cure, is well justified on the grounds of humanity and necessity. They also believe that whenever the sacrifice of any animal is required by the welfare of human beings, or of the lower animals, that sacrifice should be exacted with the least possible infliction of pain or distress consistent with the attainment of the object in view. In fact the work is done with mercy and with all the aseptic precautions of a modern hospital and all of the major operative work is done under a most carefully administered anaesthetic.

While animal experimentation began in Alexandria 300 years before Christ; but till 1846 with the discovery of ether by Morton, no anaesthetics were used. Today they are uniformly used in all research work.

What shall we say of our gratitude to Rockefeller and others who have made this great and good work possible?

Well I remember it was, I think in the winter of 1887 in the lecture hall of the College of Physicians and Surgeons, the Medical Department of Columbia University, I heard that great and good teacher Professor T. Gaillard Thomas speak with gratitude, of the princely gifts of the Vanderbilts to our college.

How he told us of the abundant evidence in history of man's desire to live in the memory of those he leaves in life when, clothed in white, he has been ferried to Boecklin's Toteninsel, over the silent river. What a chilling thought of being completely obliterated and fading from the minds of our brother man, like the baseless fabric of a dream.

How well we know that it is not the column of enduring brass or the obelisk of stone which best preserves the name entrusted to it.

To live after death our monument must be erected in the grateful hearts of those who succeed us. When the Arch of Constantine shall have made dust for the streets of Rome, the simple prayer of the "Carpenter of Gallilee," will cause a memory to live throughout the ages. But how much more noble does it appear for a gift like the Rockefeller Institute to come during the life time of the donor, certainly this good man has shared his possessions with his needy brother and is able to watch with interest the result of his beneficence.

We are, as it were, still living within the era of the first achievements of science, and thus we may hope, with Flexner, that this is merely the dawn of its beneficent triumphs.

We have, in a humble way, endeavored to tell you of your obligation to these pa-

tient workers in the research laboratories, as well as to the generous hearted men who have pledged their support to this greatest of human needs. In the name of Science, in the name of Medicine, in the name of Humanity, we thank these benefactors.

How can we more fittingly close these lines than giving utterance to that beautiful poem the "Vision of Sir Launfal," illustrating as it does, that one touch of Nature, that impulse of pity, which makes all mankind kin. In his search for the Holy Grail this knight of old journeys in distant lands and returning disappointed and dejected he sees at the gate of his castle a leper, miserable, wretched, outcast:

"And Sir Launfal said—'I behold in thee
An image of Him who died on the tree;
Thou also hast had thy crown of thorns,
Thou also hast had the world's buffets and scorns.
And to thy life were not denied
The wounds in the hands, and feet and side:
Mild Mary's son acknowledge me;
Behold through Him I give to Thee!'

"As Sir Launfal mused with a downcast face,
A light shone round about the place;
The leper no longer crouched at his side,
But stood before him glorified,
Shining and tall and fair and straight
As the pillar that stood by the Beautiful Gate.

"His words were shed softer than leaves from the pine
And they fell on Sir Launfal like snows on the brine,
Which mingle their softness and quiet in one
With the shaggy unrest they float down upon;
And the voice that was calmer than silence said
Lo! it is I, be not afraid!
In many climes without avail
Thou hast spent thy life for the Holy Grail;
Behold it is here—this cup which thou
Didst fill at the streamlet for me but now;
This crust is my body broken for thee,
This water His blood that died on the tree:
The Holy Supper is kept indeed,
In whatso we share with another's need;
Not what we give, but what we share—
For the gift without the giver is bare;
Who gives himself with his alms feeds three,
Himself, his hungering neighbor and Me."

ON THE DIAGNOSIS AND TREATMENT OF SOME OF THE COMMONER FORMS OF RENAL DISEASE.

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[Abstract of remarks made at the annual meeting of the West Virginia State Medical Association, held at Webster Springs, W. Va., July 11th, 1912.]

Among the symptoms which indicate the existence of renal disease are (1) certain urinary changes, (2) oedema, (3) certain vascular changes, and (4) uraemic symptoms. The urinary changes include albuminuria, cylinduria (or casts in the urine), increased or diminished amounts of urine, rising at night to pass urine, the passage of a 24-hour urine of lower specific gravity than normal, and, finally, haematuria.

Albuminuria, of itself, may be of renal origin, or may have its source in an inflammation of the lower urinary passages. The presence of *casts* in the urine indicates that an albuminuria is renal in its origin, but the exact kind of casts present is of relatively little significance in clinical diagnosis.

A marked diminution in the quantity of urine *(oliguria),* or a persistent increase in the quantity *(polyuria)* should always excite the suspicion of renal disease, and lead to careful analyses of the urine. Frequent urination during the night *(nycturia)* is also common in renal diseases, especially in beginning contraction of the kidney.

The inability of the kidney to pass a urine of high specific gravity, so that the specific gravity of a twenty-four-hours specimen is continuously low, *(hyposthenuria)* is an important sign. It may be due either to disease of the renal epithelium *(tubular hyposthenuria),* or to disease of the renal

blood vessels *(vascular hyposthenuria).*

Renal haematurias (with formation of blood casts) are of considerable diagnostic importance, for they point definitely to disease of the glomeruli (glomerulonephritis).

To be sure that an *oedema* is of renal origin is sometimes difficult. In contrast to the oedema due to chronic heart disease, that of renal origin may begin in the face, especially about the eyelids, not being influenced by gravity. The oedema which occurs in the late stages of contracted kidney is rarely directly due to the renal lesion itself, but is a true stasisoedema, due to beginning failure of the heart.

A persistently *high blood pressure,* accompanied by *hypertrophy of the left ventricle,* is an important sign which should lead us always to investigate the functional power of the kidneys. It appears most often in that form of contracted kidney accompanying, and probably due to atherosclerosis of the fine arterioles supplying the organs. Such patients usually first consult the physician on account of cerebral symptoms due to the hypertension (headache, dizziness, dyspnoea, fatigability), or on account of beginning cardiac insufficiently.

It is rare that *uraemic symptoms* are the first which lead a patient with renal disease to consult a physician, though this is sometimes the case. Headache, digestive disturbances, or disturbances of vision from *albuminuric retinitis,* may be uraemic in origin. Unless a systematic examination of the whole body, including the urine, be made in such cases, the cause of the symptoms is easily overlooked, and the patient may surprise us by having a convulsion or entering into a state of coma.

Clinically, the forms of renal disease (nephropathy) most commonly met with may be subdiveded into three great groups:

I. Cases of acute renal disease (or nephropathy), with or without dropsy.

II. Cases of chronic renal disease (nephropathy), with true renal oedema occurring in their course.

III. Cases of chronic renal disease (nephropathy), without oedema, lasting perhaps for years.

The first group of cases includes those usually called "acute Bright's disease," a scoop-net which includes a large variety of renal diseases, histologically and etiologically very different from one another.

The second group includes the cases often described as "subacute Bright's disease" or as "chronic parenchymatous nephritis" (large white and large variegated kidney). The third group includes the "contracted kidney," not only the so-called "genuine or pimarily contracted kidney," but also the so-called "secondarily contracted kidney."

As to the pathology of these various affections, much progress has been made in the recent past. The changes which occur in the kidney differ very much, as the injuries producing them are (a) *disseminated (focal),* in the first place, or (b) *diffuse,* the latter as a rule being the more serious.

Care should be taken not to use the word "nephritis" indiscriminately. It is desirable to limit it, definitely, to inflammations of the kidney. Many of the conditions called "nephritis," in the textbooks, appear not to be inflammations at all. When in doubt, it is better to use the term "renal disease" or "nephropathy," which can apply equally well to lesions of inflammatory, of degenerative, or of circulatory origin.

The renal diseases, or nephropathies, are divisible into two great groups, first, those due to injuries reaching the kidneys through the blood—the so-called *haematogenous* or *descending nephropathies;* and second, those due to injuries reaching the kidneys through the urine, the so-called *urinogenous* or *ascending nephropathies.*

The haematogenous nephropathies may in turn be divided into, those which are diffuse, and those which are focal. The former are due to soluble toxic substances, circulating in the blood; the latter to organized particulate substances, namely bacteria. Even soluble toxins exert an elective action on the kidney, some of them injuring one structure, others another. Thus, some poisons kill the renal epithelium and leave the glomeruli intact, others exert their injurious effect upon the glomeruli; and still others, apparently act upon the small arterioles of the kidneys, especially upon the vasa afferentia. As examples of poisons which injure the renal epithelium predominantly, I may mention corrosive sublimate, phosphorus, and the poisons produced in

the uterus of the pregnant woman. Of the poisons which injure the glomeruli predominantly the streptococcus toxins stand first. This is apparently why a glomerulo-nephritis is so often met with as a complication of scarlet fever, of acute tonsillitis, or of chronic endocarditis.

The urinogenous, or ascending, nephropathies are divisible, also, into two groups; namely the hydronephrotic nephropathies and the pyelo-nephritides.

In the following table a tentative classification of the commoner forms of renal disease has been made:

I. Renal diseases due to injuries reaching the kidneys through the blood (haematogenous, or descending, nephropathies).

A. Diffuse haematogenous nephropathies due to soluble toxic substances.

(a) Tubular degenerative nephropathies (e. g. sublimate kidney; phosphorus kidney; bichromate kidney; pregnancy kidney; haemoglobinuric kidney; kidney of cholera, yellow fever and other acute infections).

(b) Glomerulonephritis (acute, subacute, chronic).

(ba) Catarrhal form with desquamation and proliferation of capsular epithelium.

(bb) Intracapillary or thrombosing form of glomerulitis.

(c) Arteriolar nephropathy (chronic), probably due to action of toxic substances on organ arterioles, causing atherosclerosis of vasa afferentia.

B. Focal haematogenous nephropathies, due to bacteriaemias.

(a) Embolic (purulent) nephritis, in streptococcus and staphylococcus infections.

(b) Embolic haemorrhagic (non-purulent) glomerulo-nephritis (large red or variegated kidney, due to streptococcus viridans).

(c) Acute interstitial nephritis, with lymphocytic exudate, after scarlet fever.

(d) Excretory bacterial nephritis (nephritis papillaris mycotica of Orth) (casts of cocci).

II. Renal diseases due to injuries reaching the kidneys through the urine (urinogenous, or ascending, nephropathies).

(a) Hydronephrotic nephropathy (due to obstruction in urinary passages) depending on renal calculus, ureteral obstruction, prostatic hypertrophy, stricture of urethra, etc.; may be unilateral or bilateral.

(b) Pyelonephritis.

(ba) Pyogenic.

(bb) Tuberculous.

During the last decade the problems of renal disease have been diligently approached from the *experimental side*. An excellent account of these studies will be found in Dr. Richard M. Pearce's Harvey lecture on Experimental Nephritis, published in the Archives of Internal Medicine, Vol. V., 1910. Through such studies we are rapidly gaining a clearer insight into the nature of renal oedema, oliguria, anuria, polyuria, the circulatory disturbances of renal origin, and uraemia.

Very recently an attempt has also been made to approach the problems of the nephropathies, both clinically and experimentally, from the starting point of *colloid chemistry*. In the future, a training in the medical sciences will include, besides a knowledge of the physico-chemical laws which govern crystalloid substances, also a thorough grounding in the principles and facts of colloid chemistry, for the world of biological phenomena is both crystalloidal and colloidal in nature, and colloidal chemistry has the task of doing for living organisms what physical chemistry has done and is doing in the crystalloid world.

In several publications, including a book on "oedema" and another on "nephritis," Dr. Martin H. Fisher of Cincinnati, has boldly pushed forward a conception of nephritis based upon colloid chemistry, on the one hand, and upon a disturbance of the equilibrium between acids and bases in the organisms, on the other. It is his belief that all the changes that characterize nephritis are due to a common cause, namely, the abnormal production, or accumulation, of acid in the cells of the kidney. Resulting from this excessive acidity there is abnormal swelling of the tissue structures. This acounts, in his opinion, for the albuminuria, the cloudy swelling, the formation of casts, the quantitative changes in the urine, and the changes in the amounts of dissolved substances excreted. He supports his ideas by experimental work in animals, and

by clinical observations on human beings. He believes, that, in many cases, it is possible to counteract the effects of abnormal acidity in the kidney, by administering neutral salts and alkalis, and, thus, to restore normal structure and function. Though Fisher's views have been severely criticised, his conceptions interest me, though perhaps more on acount of their starting point than on account of any goal thus far reached. He will do us a very real service if he stimulates interest in physical and colloid chemistry and their application to the problems under consideration. It is especially desirable that experimenters, trained in this kind of chemistry, shall co-operate actively with other investigators trained in the methods of renal investigation hitherto used, for the purpose of extending our knowledge of renal function and of renal disease. The studies of Dr. A. W. Sellards indicate that in a certain proportion of patients suffering from renal disease, a very much larger amount of sodium bicarbonate has to be injected into the blood to make the urine alkaline, than is necessary in normal individuals. But he finds also many suffering from renal diseases, in whom this is not true.

A growing interest has been manifested, recently in so-called *functional tests,* as applied to the kidney. They have been especially helpful, in unilateral renal disease requiring nephrectomy, in determining the functional efficiency of the kidney on the other side, the urine being collected separately from the two kidneys by means of ureteral catheterization.

The most important recent addition to our methods for measuring the functional efficiency of one kidney or of both, is the *phenolsulphonephthalein test* introduced by Rowntree and Geraghty. This is not difficult to apply, and is helpful in medical, as well as in surgical work. Normal individuals excrete from 50-65% of the amount injected in the first hour. When renal efficiency is impaired, the output may be quantitatively greatly decreased, and the excretion delayed. Dr. Helen Watson has applied the test in over one hundred medical cases with confirmatory results and Drs. Rowntree and Fitz, at the suggestion of my colleague, Dr. Thayer, have carefully compared the findings, in a series of cases, after the phenosulphonephthalein test, with those after other functional tests (potassium iodide tests, lactose tests, sodium chloride tests). It appears, that for many purposes, the phenosulphonephthalein test is more reliable than the other tests, though the lactose test, as used by Schlayer and Takayasu, also seems to be valuable. It is believed that the phenolsulphonephthalein test gives a clue to the efficiency of the renal epithelium, the lactose test to the efficiency of the glomeruli and vasa afferentia. These two tests, together with a consideration of the hyposthenurias (tubular and vascular), make functional renal testing a valuable clinical procedure.

Our knowledge of the etiology of renal disease permits now of a more rational *prophylaxis* than could formerly be applied.

To prevent the ascending (urinogenous) nephropathies, we must prevent obstruction to urinary outflow, and infections of the urinary passages; or we must treat them quickly after they occur.

To prevent descending (haematogenous) nephropathies, we must prevent, or control toxaemias and bacteriaemias. The occurrence of the glomerulo-nephritides, due to streptococcus toxins, emphasizes the importance of dealing promptly with all streptococcus infections, especially with streptococcal sore throat. Here, the general practitioner can do much in the way of prevention. Every individual who suffers from sore throat, tonsillitis, or a bad cold with fever, should be put to bed, and be kept warm there, until the infection is overcome. Furthermore, foci of chronic infection in our patients (chronic tonsillitis, chronic sinusitis, pyorrhoea alveolaris, chronic appendicitis, chronic cholecystitis, chronic prostatitis, chronic salpingitis, etc.) should be carefully watched for, and in many cases, removed.

To prevent the arteriolar nephropathy, or genuine contracted kidney, we must use the prophylactic measures against atherosclerosis. Over-indulgence in food in alcohol, in tobacco, and in the pleasures of sex and of work, may be warned against. If arterial hypertension have already appeared, a strict regime should be instituted and maintained.

In the *treatment* of renal diseases, the dictum of Traube still holds good: "Pro-

tect the kidneys, and control the heart."

In the protective therapy, we avoid, as far as possible, all further injury to the kidney by toxic substances, infections, etc. We lessen the amount of work thrown on the kidney, in normal metabolism, by choosing a suitable diet (limitation of proteins and sodium chloride), and by increasing the eliminatory functions of other organs (skin, intestines, lungs).

In every case of renal disease, the condition of the heart should be carefully watched. Indeed, chronic passive congestion of the kidneys, due to cardiac insufficiency, may, of itself, cause marked albuminuria and cylindruria. The albumin, as well as the casts, may disappear from the urine when cardiac compensation is reestablished. And when the kidneys, themselves, are diseased, the urinary symptoms may be markedly exaggerated if the heart begin to fail. "Every renal patient is also a cardiac patient;" in treatment this should always be kept in mind.

To the combating of cardiac insufficiency, I shall not refer at this time, as I have already dealt with that topic in a former paper.*

In combating general anasarca in renal disease, we use a salt-poor diet, diuretics, mild purgatives, and when necessary, heart tonics. Diuretin and theocin are excellent stimulants to the renal epithelium, while digitalis preparations improve the circulation in the kidney. Mild purgation is usually sufficient. Violent purgation is often harmful, exhausting the strength of the patient. The influence of a salt-free (or salt-poor) diet, in reducing renal oedema, is sometimes remarkable, especially in acute cases; but a salt-free diet should never be kept up for a long time, or it will do more harm than good. The patient is told to add no salt to his food, and he may use salt-free bread and unsalted butter, together with one liter or one and a half liters of milk.† Sugar, rice, potatoes, fruit, vegetables, salad, chocolate, coffee, tea and cereals, if no salt be used in their preparation, are practically salt-free foods. Meat and eggs are also salt-free but should not be used to any great extent, in such cases, on account of their high protein content. In the French clinic of Widal a salt-poor diet consisting of 200 grams of salt-free bread, 200 grams meat, 250 grams vegetable, 50 grams unsalted butter, and 40 grams sugar is employed. Such a diet contains 1,500 calories, and is sufficient for a patient lying in bed. It represents about 60 grams of protein—a low value. I have seen patients, on a similar diet, lose 20 to 30 pounds in a week, from reduction of the oedema.

In the treatment of uraemic symptoms, similar principles are followed, viz:—vicarious elimination, by mild purgation and diuresis, cardiac tonics, protective diet. When uraemia is threatened, it may be well to limit the food, for a short time, to milk sugar, dissolved in water, and fruit juices; later milk may be added. In some cases of uraemia, venesection may be life saving; when convulsions recur frequently, lumbar puncture may be tried.

In the management of contracted kidney, we attempt to prevent further action of the cause (atherosclerosis; streptococcus intoxications). To combat a developing atherosclerosis, the whole mode of life has to be systematically ordered. A lacto-vegetarian regime is instituted, and several small meals per day substituted for three large ones. Constipation, if present, is combated, as is also abnormal intestinal fermentation (administration of tablets containing bacillus bulgaricus). The increasing blood pressure should be watched, but it must be borne in mind that it is a compensatory process, rarely to be combated directly by the high frequency current or by vaso-dilating drugs (nitroglycerin; sodium nitrite; vasotonin), but, as far as possible, by a prevention of the intoxication which causes it, that is to say by dietetic and general hygienic measures. Above all, the strength of the heart must be maintained, for, unless he die from apoplexy, the patient suffering from contracted kidney, sooner or later, suffers from cardiac insufficiency. When this begins to appear (dyspnoea; cardia oedema), or if uraemia be threatened, complete rest and digitalis therapy are indicated; diuresis may be fav-

*On the Treatment of Some of the Forms of Cardiac Failure, Va. M. Semi-M., Vol. XV, 1911, 457-486.

†Milk is not salt-free; it contains 1.6 grams of sodium chloride per liter.

ored by theocin, the bowels kept open by laxatives, and the skin active by warm packs.

In contracted kidney, the patients pass large quantities of urine. Sudden reduction of the amount is usually a bad sign; it may indicate, either a failing heart, or an acute nephropathy, superimposed upon the contracted kidney.

If his life be well regulated a patient, suffering from contraction of the kidneys, may go along for many years, even decades, in comparative comfort, especially if he will choose a good climate to live in and will avoid infections and chilling of the skin.

THE MICROSCOPE AS AN AID TO DIAGNOSIS.

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(Read before Cabell County Medical Society, January, 1912.)

In writing this paper, it is not my intention to consider all the uses of the microscope, or to give you something new on this old subject, but it is to be more in the way of a review of some of its commoner uses, and a plea to make better use of our microscopes. Most every physician has a microscope, or has the use of one, and, I am sorry to say, that they are not used as much as they should be. The microscope is one of the oldest and best instruments devised for aid in diagnosis, and in these days of great advancement, the physician should not be satisfied until he has exhausted every means he has to arrive at the proper diagnosis. It is true, microscopical examinations take time, but with a little labor almost any physician can soon learn to make them both quickly and efficiently.

First, I will take up the examination of urine. Of course, you are all more or less familiar with the methods of urinalysis, but the point which I wish to bring out is the value of a microscopical examination of the sediment. A large majority of physicians are satisfied with making tests for albumin, sugar, and the specific gravity, totally disregarding the microscopical examination. The things to be sought for are casts, epithelial cells, pus, blood, mucus, crystals and amorphous mineral substances.

Casts in the urine, in the great majority of cases, are an indication of nephritis, and are usually associated with albumin, although either one may be present without the other. Their number is greatest in acute and chronic parenchymatous nephritis, fewest in contracted kidney and chronic passive congestion.

Albumin is scanty and often absent in chronic interstial nephritis, and, without a microscopical examination, such cases may be overlooked, and with dire results. The disease has a most insidious onset and symptoms are often absent. Uremia is of frequent occurrence, and is often the first symptom noted. It is true, a lowered specific gravity is one of the best diagnostic urinary signs in this condition, but a specific gravity determination, unless made from a sample of a 24-hour specimen, is almost worthless. Casts, of the hyaline and granular variety, though few in number in interstitial nephritis, are most uniformly present, and can usually be found without a great deal of trouble.

Any variety of casts may be found in any form of nephritis. Hyaline and granular are the most common, and more often associated with chronic processes. Epitheial casts occur especially in acute parenchymatous nephritis, while fatty casts are usually found in chronic parenchymatous nephritis. Blood casts are found in hemorrhagic nephritis and in trauma of the kidney, and pus casts in suppurative nephritis.

The sudden appearance of immense numbers of casts in a case of diabetes is an important prodromal symptom of diabetic coma. These casts are characteristic—short, broad and pale, and usually of the hyaline and granular varieties.

The other constituents of the urinary sediment have not such diagnostic import as casts. Epithelial cells may come from any portion of the genito-urinary tract, and, with the exception of the bladder and vaginal cells, are hard to differentiate. Pus and blood also may come from any portion of the tract. Their source must be determined from the symptoms and microscopical appearance of the urine.

The various crystals found in the urinary sediment are not considered so important as they formerly were. A considerable

increase in the urates and uric acid may indicate an impending attack of gout, and the presence of triple phosphate crystals in the freshly voided urine is an indication of decomposition in the bladder from cystitis.

Now as to the method of making these examinations.. The technique is simple, does not involve much time, and does not require a great deal of experience. The urine should be comparatively fresh, as the casts and other organized elements rapidly disappear in old urine unless preserved with a piece of camphor or a few drops of formaldehyde solution. The urine is best centrifulgalized, though if a centrifuge be not at hand, allowing the urine to stand in a conical glass answers the purpose very well. A drop of the sediment is drawn up in a pipet and blown upon a slide. The specimen may then be examined either with or without a cover glass.

In bacteriology the microscope has an almost unlimited field for its use. I will take up only those conditions of everyday occurrence which the physician is so often called upon to diagnose.

Gonorrhea is perhaps the most common disease requiring a bacteriological examination with which the physician has to deal. Of course, it seldom happens that a bacteriological examination is necessary to establish a diagnosis of gonorrhea, but in every case the physician should make a smear of the pus and examine it when the patient first comes to him. The most important use of examinations for gonococci is to determine when the patient is cured. Towards the end of a gonorrheal infection, gonococci are often few in number, the discharge being caused chiefly by other organisms, such as the staphylococci. Such a condition requires a different line of treatment, and the only way to determine this is by repeated examinations of the discharge and urinary shreds. Many cases of gonorrhea are discharged as cured, when a microscopical examination would show that they are not. A patient should not be considered cured until repeated examinations of the urinary shreds show the absence of gonococci for at least two weeks.

The method for examining the urethral discharge is as follows: Thin, even smears of the pus are made, either upon a cover glass or slide, and fixed by passing through a flame two or three times. They may be stained with Loeffler's alkaline methylene blue and examined with an oil-immersion lens. The gonococci appear as diplococci within the protoplasm of the pus cells; a few, though, are found free in the pus. In examining the shreds microscopically they are taken from the urine by means of a platinum loop or pipet, placed on the slide, the excess of urine absorbed with blotting paper, and the specimen stained. The pus cells are shrunken and somewhat disintegrated, and it requires more technical skill to demonstrate gonococci than in pus. If we find intracellular diplococci with the methylene blue stain, we can be almost sure that they are gonococci. A positive diagnosis can be made if we find Gram negative diplococci after staining with Gram's stain and counterstaining with Bismark Brown. This method, however, involves more time.

The microscope is an invaluable aid in the diagnosis of pulmonary tuberculosis. In fact, an absolute diagnosis can be based upon one, and only one finding—the demonstration of tubercle bacilli in the sputum. The ordinary method of demonstrating them is simple, and can easily be carried out in the physician's office. A small amount of the sputum is taken with a platinum loop and evenly spread upon a clean slide. The smear is stained for about five minutes with carbol-fuchsin, gently heating it until it steams. The specimen is decolorized with a 25% alcoholic solution of nitric acid until no color is apparent to the naked eye. Then counterstain with Loeffler's alkaline methylene blue. The tubercle bacilli appear red, all other structures, blue. This method, however, often fails, for a number of reasons: (1) there may be no bacilli in the sputum, (2) the technique or stains may be at fault, or (3) bacilli may be present in such small numbers that they are easily overlooked. The latter is the most frequent cause for failure in the clinically positive cases. Repeated examinations over a number of days will usually show them if they are present.

Recently a method has been devised by which the tubercle bacilli are concentrated, thus saving a great deal of time and labor.

This is done by digesting the sputum in antiformin, a preparation containing sodium hydroxid and sodium hypochlorit. Practically everything in the sputum is dissolved with the exception of the acid-fast bacilli. A mixture of sputum and antiformin is placed in a conical glass and allowed to stand until digestion is complete and the sediment has collected at the bottom. The sediment is washed in water and then examined in the ordinary manner for sputum. Boardman, of Johns Hopkins, who has done a great deal of work with this method, found the bacilli tuberculosis by the ordinary method in only 31 of a series of 73 clinically positive cases. By the antiformin method, he found the bacilli greatly enriched in the 31 cases, and was able to demonstrate them in 16.6% of the remaining cases, negative to the ordinary method.

The physician's diagnostic ability is often taxed to determine whether a sore throat is diphtheria, tonsillitis, or some other similar condition. The microscope will relieve the physician's mind and often save the patient a needless injection of antitoxin. In all cases of sore throat with a membrane, smears should be made by rubbing a cotton swab over the exudate and then transferring it to a slide. Such smears can be stained with methylene blue. It requires some skill to be able to recognize the bacillus of diphtheria, but this can be gained with experience. When possible, cultures should be made on Loeffler's blood serum. After 12 to 18 hours' incubation, if the organisms are present they can be recognized without much trouble.

The diagnosis of a sore on the penis is often a puzzle. Formerly the rule was, in case of doubt as to the nature of the infection, to treat the sore antiseptically and to wait to see if secondary syphilitic symptoms would develop. Since the spirochaeta pallida has been acknowledged to be the cause of syphilis, the finding of this organism in the sore has enabled the physician to start treatment at once, thus saving considerable time, and often saving the patient the embarrassment of having secondaries develop. Until recently the demonstration of the spirochaeta has been a dfficult procedure, but now there is a method which is reliable, rapid and extremely simple. I refer to the use of India ink. A drop of serum is squeezed out of the lesion, is mixed on a slide, with a drop of the ink, and the mixture smeared with the edge of another slide. When the smear dries it is ready to be examined with an oil-immersion lens. The spirochaetae appear unstained on a black background.

Now let us pass to the use of the microscope in blood examinations. The value of blood examinations must be measured by the practical use which may be made of them. They are of more value to the medical man than to the surgeon, for the surgeon can dispense with them, while the internist cannot.

For the diagnosis of malaria the microscope is the best means we have, especially in those forms without definite paroxysms and with an atypical course. There are many such cases that often pass as typhoid fever, meningitis, pernicious anemia, or tuberculosis, while if a careful blood examination were made the true nature of the disease would become apparent. On the other hand, there are many conditions diagnosed as malaria when they are not. "Malaria," like "rheumatism," covers a multitude of sins.

In examining the blood for malaria organisms, the fresh specimen or the stained specimen can be used. The organisms are more easily recognized in the fresh specimen, but they are not so easily found as in the blood stained specimen. The technique is fairly simple. A drop of blood on a slide is covered with a cover glass, and the specimen is ready for examination. In making stained specimens, a drop of blood is placed between two cover glasses and the glasses pulled apart, or, a drop of blood is placed near the end of a slide and then spread by drawing across it the edge of another slide. The smears thus made are dried in the air and stained with any of the polychrome methylene blue-eosin mixtures. Probably one of the best is Leishman's modification of the Romanowsky stain. These methods answer very well if the organisms are present in large numbers, but usually the practitioner has not the time to look through a large number of fields of the smear when organisms are scarce. For such cases the technique of Ross, which concentrates the organisms,

is recommended. A thick drop of blood is placed on the slide, spread over an area about the size of a dime, and thoroughly dried in the air. The hemoglobin is then washed out by covering the slide with water. After drying again the specimen is stained. In such a specimen parasites appear numerous, when in ordinary smears scarcely one is found. With a little patience the physician can soon familiarize himself with the technique and the appearance of the malaria organisms.

Another condition which is uniformly overlooked without a blood examination is pernicious anemia, the diagnosis of jaundice, peripheral neuritis, tabes, or what not being made. Blood smears should be made as I have mentioned, and stained with Wright's, Jenner's or Leishman's stain. The characteristic blood picture is a great reduction in both the hemoglobin and in the number of red corpuscles. The color index is increased, that is, the reduction in the number of corpuscles is greater than the reduction of the hemoglobin, consequently the individual corpuscle contains more hemoglobin than in the normal. This is just the opposite of chlorosis and of chlorotic anemias, in which the reduction of hemiglobin is greater than the reduction in the number of the corpuscles. The red cells in pernicious anemia usually show decided changes both in size and in shape. Nucleated red cells are more or less abundant. The leucocytes are usually decreased, though the lymphocytes are relatively increased.

Leukaemia is also another condition the diagnosis of which depends entirely upon the microscope. It is true the symptoms are important, but they are common to a number of diseases, and a blood examination reveals the nature of the disease at once. This has an immense practical value, because before the blood is examined, the cases are nearly always considered surgical, the enlarged spleen being mistaken for an abdominal tumor of another sort. A red and white count and a differential leucocyte count must be made. The blood changes are characteristic. There is a reduction of the red corpuscles and of the hemoglobin. The leucocytes are enormously increased, the count being between 50,000 and 500,000 or more. In splenomyelogenous leukaemia 20-60% of the leucocytes are myelocytes, which may be recognized by their large size, large round nucleus, and neutrophilic or eosinophilic granules. In lymphatic leukaemia the small lymphocytes predominate, sometimes averaging as much as 90% or more in the count.

The diagnosis of certain diseases caused by animal parasites, such as trichiniasis, filariasis and uncinariasis, is greatly aided by a blood examination, there being a relative or absolute increase in the number of eosinophilic leucocytes. Bronchial asthma is also a condition in which there is an eosinophilia.

In pneumonia a leucocyte count is very important; not so much as a means of diagnosis as of prognosis. The leucytosis is an expression of the resistance of the organisms against the infection. The average count in pneumonia is 20,000 to 30,000. A high count gives us no idea of the prognosis, but a low count, in a severe infection, is always a bad sign, and such cases usually terminate fatally. The leucocytes drop with the temperature, and if they remain high after the crisis, they suggest delayed resolution, empyema, or gangrene of the lung. Blood examinations to the surgeon usually mean leucocyte counts. In most cases he can dispense with them, for the symptoms and physical signs are more important, but when it comes to a question of immediate operation they are indispensible. In appendicitis leucocytosis is an indication of the severity of the case. If the leucocytes are rising it is an indication for immediate operation, regardless of the abdominal symptoms. If they are stationary the operation can wait. A high count usually means pus, gangrene, or peritonitis. A low count may means a simple cartarrhal case or a well walled abscess. A leucocyte count is of great value in cases of suspected typhoid perforation. The count is interpreted in general as in appendicitis, a rising count being an indication for immediate operation.

It is important for both medical men and surgeons to remember that one count is seldom sufficient, any more than is one temperature determination enough. Unfortunately blood examinations take time, but with a little practice a blood count can be made in 15 minutes, and made well.

Differential counts and examinations of smears take more skill, but good results can be obtained by any one who takes the time and has the patience.

Finally, I wish to speak of a subject which is of more interest to the surgeon than the internist—that is, the microscopical examination of pathological tissues and organs. Such examinations, naturally, are usually made after the operation, and you will say, "What bearing, then, has it upon the diagnosis?" It is very important, and every tissue removed at an operation should receive a microscopical examination to determine the pathological diagnosis. Often the diagnosis, which has worried the surgeon to some extent, will be cleared. Recently I saw a patient, a woman, in whom there was a tumor low down under the anterior axillary fold. There was no tumor palpable in the breast proper, however. This tumor may have been cancer, tuberculosis, inflammatory glands, or one of a number of conditions. At operation, to be on the safe side, the whole breast was removed. A microscopical examination showed the tumor to be a mass of lymph nodes infiltrated with carcinoma. Had the surgeon been inclined to be conservative and left the breast, another operation would have been necessary, with great inconvenience and danger to the patient.

In cases of suspected malignancy, when the diagnosis is not positive, a small portion of the growth should always be removed and examined microscopically. This will usually clear the diagnosis, and the surgeon will have no doubts as to the proper operation to perform.

A great deal of pathology can be learned from such examinations, and subsequently, when the surgeon has to do with a similar case, he is better fitted to perform the operation. Occasionally rare conditions which may not be recognized in the gross specimen, are met with at operation, and, if microscopical examinations are not made, valuable additions to the study of medicine are lost.

In conclusion, let me again urge upon the profession to use the microscope in every condition in which it will be of value. It will take some of the physician's valuable time, but in the end it will be a great saver of time. Careful microscopical examinations may mean a great deal to the patient, and eventually they will add a great deal to the physician's reputation.

DRUG ADDICTION—CELL DESTRUCTION—A GLANCE AT ITS PATHOLOGY.

J. W. Williams, M.D., Richmond, Va.

"The improvement of the microscope and of histological methods has rendered possible the discovery of changes in organs and cells, which fifty years ago were undreamed of."—(Sir Victor Horsley, F.R.S., F.R.C.S., M.B., B.S., late Prof. of Pathology in the University College Hopsital, London).

Drug addiction is chiefly limited to the class of medicines known as narcotics, and includes opium, alcohol, ether, chloral, cocaine, cannabis indica and heroin. "They first influence the cells of the cerebral cortex."—Dr. Paul B. Barringor in *Transac. Med. So. of Va.*). All of these drugs have a two-fold action upon the brain and nervous system. (a) temporarily exhilarant, lasting for a short time; (b) a sedative or depressant effect lasting much longer, in proportion to the amount taken; the heart slowing down to the danger point, and the habitue often sinking into insensibility. All of these drugs taken in excess have the same physiological action—a short stage of excitement followed by a complete lack of mental control, fall of bodily temperature followed by a deep sleep and lack of power to move or feel. Alcohol, (public opinion to the contrary notwithstanding,) acts in the same way. Before the discovery of ether or chloroform, Dr. Collier in 1839, performed a surgical operation on a negro "who was rendered insensible by breathing the fumes of alcohol."

The convoluted surface (cortex) of the cerebrum is composed of masses of minute bodies called nerve corpuscles (cells) which are grouped in "areas," or "centers"—"sersori receptive areas" and "sensori motor areas," which have two functions, (1) of receiving and recording the sensations which are constantly coming in from our sense-organs, the eye, the nose, the ear, the skin, the muscles; (2) of the issuing or sending out impulses to the muscles to pro-

duce movements. The posterior spinal nerves report sensations *to* the brain; and the anterior nerves send their messages *from* the brain to the various parts of the body. The dura mater lines the skull, while a more delicate vascular membrane, the pia mater, consisting of a dense network of blood vessels, covers the convoluted surface of the brain, and sends its minute arteries and veins into all of its parts, thus keeping the protoplasmic nerve-cells bathed in healthy blood, which contains nourishment essential to their vitality.

It must be remembered that all plants and animals are built up of the very small atoms of matter called cells, from the microscopic, unicellular *torula* (one-cell) or yeast plant up to the patriarch of the forest—the oak; and from the *ameba* (one cell) up to man who crowns the summit of this living pedestal of animal life. "The organism is not an individual, but a social mechanism—always bringing us at last to cells." (Virchow). Now it is the life of the individual cells that forms the ultimate basis of the complex phenomena of the life of man. And the question at once arises: what physiological effect has morphine, cocaine and alcohol upon the integrity of these cells of the brain and nervous system? All of these drugs enslave or form "habit" and directly influence the cells of the cerebral cortex. "All cerebral stimulants effect the cranial centers in the inverse order of their development—(Dr. Barringor)—the intellectual faculties first, then other vital functions, and last and lowest of all, the functions of respiration and circulation. When ether or chloroform is pushed we see one function after another is abolished, even reflex motion is destroyed, and only respiration and circulation are maintained. "Or let us recall the all too well known physiological action of alcohol in excess, and see how it conforms to the above law." (W. H. White, London). "If alcohol" (and the narcotics of its class mentioned) "first stimulates and then successively exhausts the centers of inhibition—that is, man's center of control—is it not certain that a center thus daily and hourly exalted and depressed will in time be injured?"—Dr Barringor). The enslaving drugs above mentioned are comparatively new. The first line upon opium addiction appeared in 1862. A little before this, the alkaiold morphine appeared—then the hypodermic needle followed. China had for ages been using the crude opium, but not the alkaloid morphine. Erythoxylon coco had been used by the inhabitants of Peru, but they never heard of the alkaloid cocaine, which came into use about 1880. The Jews used grape juice and fermented wine four thousand years ago, which contained about 4 or 8 per cent alcohol, but not our concentrated alcoholic whiskies. (See old Testament currency of *chemer, yanin* and *Tirosh*—Gess. Heb. Lex.) Europe never heard of the distillery prior to the eleventh century. Recent experiments upon the lowest forms of cell-life starting with the one-cell plant (torula) up to the cresses, craniums, etc., and with the *medusae* (one-cell) up to man of many millions of cells, have shown the destructive effect of alcohol upon the cells both of plants and animals. Profs. Ridge and Hodge have demonstrated the alcoholic destruction of plant-cells. And Sir B. W. Richardson and other observers are unanimous in their teachings based upon careful investigation of the injury of alcohol upon protoplasmic cell-life, both animal and vegetable. Now as the foundation of all cell-life, animal and vegetable, is the same—protoplasmic, the bearing of these recent investigations of the injurious effect of alcohol, and especially morphine, upon the brain of man, is at once apparent. Dr. Mott (See Sir Victor Horsley's work, p. 121) exhibits sections of the brain taken from the sensori-motor area and sections taken from the same area of the brains of the alcoholics, who died at Claybury Asylum. The contrast is striking. "The nerve-cells in the alcoholic brains have extraordinarily diminished in numbers, having degenerated and wasted away. The majority are *shrunken* and hopelessly *wasted* away. The cells *degenerate, shrink and disappear.* The cells damaged in this way *never* recover, and as far as we know are never replaced." The experiments of Kraepelin at Heidelberg show that alcohol is neither a tonic nor a stimulant. The bar of scientific research refuses to accept the theories and traditions of the past unless they are endorsed by science at the bedside and in the laboratory. This is the latest and most alarming testi-

mony of science as to the damaging effects of alcohol and morphine upon the living organism of man. Add to this that fifty per cent of the children born to alcoholic parents are degenerates, and remembering the suffering and misery entailed upon the individual and national life, and we face a problem that appeals to all good men and to the state for immediate solution. The effect of morphine poured daily into the blood through the hypodermic needle and carried by the circulation up and into the microscopic blood vessels of the pia mater is to rob the blood of its healthy cell-food; and the effect of blood loaded with constant daily doses of morphine or alcoholic poison, when brought into direct contact with the cells of the brain, is (*a*) to starve them for the want of that very nourishment upon which their vitality depends, and (*b*) the "habit" now formed enslaves the victim who, now conscious of his deplorable condition and sinking lower and lower mentally, physically and morally, yet has no power to arrest his downward course, dies either from extreme weakness (Osler, cell-starvation), insanity or suicide. The sensori-motor area through the interior spinal nerves sounds the alarm louder and louder ("agony") as the danger line is approached. This pain ("agony") or distress is the cry of the nerve-cells of the entire body for their natural food, and unless heeded the helpless victim sooner or later perishes, and leaves a wrecked and wasted life and fifty per cent of his children degenerates as a legacy to his heart-broken family.

2304 East Broad street.

IMPROVED MAXILLARY SPLINT.

W. P. Megrail, M.D., Wheeling, W. Va.

About 1¼ inches from each end of the Levis Maxillary Splint two crescentric holes, about one inch long and three-eighths of an inch wide, are punched three-eighths of an inch apart, parallel with each other and with axis of splint.

The end of a half yard strip of bandage is passed through one of these holes and out through the adjacent one, and another strip of bandage placed similarly in the other end of splint; then after the splint is applied to the fracture the end of one strip of bandage is tied behind the neck to its fellow of the opposite side and the other two loose ends are tied over the top of the head, as is usual with the "four-tailed" bandage.

Secured by this very easy and simple method, the splint is held firmly in place, with no danger of it becoming loose; neither is any additional bandaging required.

South Penn and Zane streets.

Selections

THE DOCTOR IN POLITICS.

N. R. Price, M.D., Marlington, W. Va.

The January *Recorder* contains an excellent editorial on "The Doctor and Business Success." After dealing with the doctors who seem unable to resist stealing patients, or at least butting in on cases after consultation is had, and that other type of hero in medicine who is always saving lives by being called just in the nick of time, and pointing out that no permanent prosperity can be enjoyed by physicians guilty of such shallow methods of gaining reputation and business, the editor goes on to say that the doctor should not engage in politics, except to vote right, discriminating between principles and parties, and vote for men and measures and not in a partisan way, which is all very good as far as it goes.

Now I have been practicing medicine actively for ten years, during five of which I have held some elective office or other, and am now holding an office (President Board of County Commissioners, or County Court, as it is called in West Virginia), which term does not expire until 1916, so we feel inclined to say something in defense of the doctor engaging rather actively in

politics, even to the extent of running for office.

Local conditions in West Virginia are heated politically, the state swinging both ways, and just now its very uncertainty is giving it a prominence in national politics that its mere numerical strength does not entitle it to. It would seem that a physician should refrain from entering actively into politics here, if anywhere, where political contests are apt to be close and fought out with bitterness. However, I believe that under such conditions the physician, who is, or should be, an honest and enlightened man, should assert his manhood and independence and if need be run for office, if the conditions of local government seem to require his type of man in office.

It may be that this or that man's business may be lost to the doctor following the heat of contest, or during the administration, but often a friend is gained for one lost, and the doctor revolves in his little orbit about as usual, and the end of the year shows about as much business or more than when his time was not sacrificed politically, or business estranged by political rancor. It seems to me that doctors and preachers are apt to "pussy-foot" it in the community until they are rightly consigned to the society of the ladies and children, and are scarcely conceded the rights of independent thought and action that becomes every free-born American citizen. If I deemed it incumbent, or even expedient, to resign my freedom of thought or independence of action respecting the local government of the community in which I live, and in which every good citizen should take the keenest sort of interest, I would speedily get out of a profession so narrowing, and in some other line of effort earn the right to life, liberty and the pursuit of happiness and the independence that well becomes a man.

My observation of the doctors who are always and forever "too busy" to attend a convention or town board meeting or state or local medical society, is that they are not usually the leaders in their professional work, even in the community in which they live. The rule holds good, if you want a thing done get a man who works to do it, not the one who is merely busy.

The manly and independent physician is apt to be a fairly good business man, a good collector, specializing in some line whereby he can give most of his time to office practice, or at least working to that end, and not spending much time running about the country calling on people who will never pay him. Many of our physicians, in fact most, are men who are thrust into the midst of things at a tender age, following a high school and medical course, and thus handicapped have struggled through a long life, never rightly appreciating or able to cope with the ordinary cussedness of human nature. The grocer's boy or the journeyman printer has better appreciation of these things than the average young doctor at the ushering in of his medical career. If he succeeds measurably it is by holding on and gaining in the hard school of experience. Some of the best doctors of my acquaintance are men who, lacking help in early youth, have engaged in some form of effort that has brought them in intimate contact with their fellowmen, and rather late in life perhaps took up the study and practice of medicine. Then, when armed with a medical diploma, they located for the practice, they could at least meet men as men and use ordinary business sense in dealing with their clients, insuring a competency and the self-respect and confident bearing pertaining thereto.

In conclusion, politically, to the doctor: run for office if you have a "call" and think you can be elected, and if there is some real need for intelligence and zeal in the particular position to which you aspire. Never run to be a running. If you get in a contest of this kind conduct yourself so that your adversary will beware of you next time. It is usually some minor office, but one of great importance to the community—town council, school board or legislature. Endeavor to familiarize yourself early with the duties of the office and make good. When done with the job in hand, then quit until some occasion arises which calls for the peculiar knowledge and abilities you have gained by former experience.—*Wisconsin Medical Recorder.*

(The above, from one of our own members, contains excellent advice. That the holding of a political office has not spoiled this doctor is demonstrated by the fact that he recently rode horseback 62 miles over the mountains of West Virginia to attend the annual meeting of the State

Medical Association. Such a man is apt to be useful in whatever position he may be called to occupy.

We have always felt that a physician should be a public-spirited citizen. Far above the average in intelligence, character and social standing, he can usually wield an influence for good in whatever public position he may fill. In Wheeling physicians for many years have been especially active in the Board of Education, at least a half dozen having become President of that board, which at present contains six members of our profession. Let doctors make themselves useful in Boards of Education, City Councils, and if their finances permit, in Legislatures; and if one chances to reach the high office of Governor, we do not believe the State will suffer as a result.—EDITOR.)

HAY FEVER—A REVIEW OF LITERATURE.

Wm. B. Chamberlain, M.D.,
St. Louis, Mo.

The near approach of the hay fever season calls again our attention to that disturbing, if not fatal, periodic affliction and confronts us with two questions: (1) What is known in regard to the etiology of the disease; and (2) what advances have been made in its treatment.

The etiology of hay fever seems to be fairly well settled and may be stated in brief as follows: (1) An irritating cause, consisting principally of the pollen of certain grasses and weeds, included mostly under the order of Graminaceæ; and (2) an individual who is especially susceptible to this irritation. Many theories as to the cause of hay fever have arisen from time to time, but the pollen theory seems to be the only one which has stood the test of time and careful investigation. Leastwise, it is the theory which at present is most universally accepted. In regard to individual susceptibility, it is an undisputed fact that hay fever victims are found in an overwhelming percentage among those in the better walks of life, among brain workers rather than manual laborers. In addition there seems to be some susceptibility which might be designated as an "hyperesthesia of the nasal mucous membrane to the pollen of various grasses." Of course such contributing causes as heredity, race, social conditions, as well as a more or less neurotic temperament should be taken into consideration.

The symptoms of hay fever are too well known, even to the laity, to necessitate repetition. In the United States the attacks occur at two seasons of the year: (1) The late spring or early summer, when they are usually known under the name of "rose cold;" and (2) in the late summer, usually beginning between August 15th and 21st, when they are known as "hay fever." An unfortunate complication of the latter variety especially is a so-called hay asthma, which may cause even more annoyance than the hay fever itself.

The treatment of hay fever at the present time may be included under five heads: (1) The nasal treatment; (2) the antitoxin treatment; (3) serum treatment; (4) alcoholic injections and cauterization, and (5) climatic treatment. No advances have apparently been made since the introduction of pollantin in 1903 by Dunbar, of graminol some time later by Weichardt, and the injections of alcohol along the nasal nerve and its branches, as suggested in 1908 by Stein.

(1) *Nasal Treatment.*—Many hay fever victims are the subjects of nasal malformations and new growths of various sorts. To say that the nose of every subject is abnormal, or that a nasal abnormality exists in every such case would be wide of the truth. The majority of such cases, if examined in the intervals, are found to possess nasal structures apparently normal in every way. Doubtless some nasal abnormality is found to be the underlying cause in a fair proportion of cases, such lesions being obstructive in character, as deflected septa, polyps and polypoid hypertrophies, or inflammatory, *e. g.*, diseases of the nasal accessory sinuses.

In a certain number of cases the correction of the nasal abnormality or cure of the underlying disease will serve to relieve the patient of his attacks. It should be beneficial in all cases. The cases should be carefully examined before the beginning of the expected attack, so that there may be complete recovery from any operative interference before the attack has its incipiency. It is superfluous to add that there should be no operative interference during the seizure. Yonge has reported certain good results from the bilateral excision of the nasal tubercle, though he considers that he has

tried this procedure on too limited a number of cases to draw too general or definite conclusions.

(2) *The Antitoxin Treatment.*—In 1903 Dunbar of Hamburg first published his investigations in regard to a specific antitoxin, later introduced to the profession under the trade name of pollantin. Having previously convinced himself that the disease was due to the pollen of certain grasses, he succeeded in isolating a toxic albuminous substance which produced in animals symptoms similar to those observed in human beings. Later by injecting the pollen of certain grasses into horses he succeeded in producing an antitoxin which, when introduced into the nose and conjunctival sacs of human beings during an attack, caused the disappearance or amelioration of the symptoms of the disease. Pollantin is obtainable in a dry as well as a liquid form. The treatment in predisposed subjects should be instituted seven to ten days before the beginning of the attack and carried out during its progress. A general resume of the published statistics shows good results in 62 per cent of cases, fair results in 23 per cent and no result in 15 per cent. The treatment should be carefully carried out according to the directions which are to be found on each package.

(3) *The Serum Treatment.*—Some time after Dunbar's investigations Weichardt introduced a serum which is now known under the trade name of "graminol." "Weichardt believed that there existed in the blood of cattle, fed on the grasses ordinarily used for pasture, a substance which might be protective against hay fever. A serum was therefore prepared from the blood of such animals, without any previous inoculation or other preparatory treatment being practiced." According to reports of the German Hay Fever Union there were favorable results in 75 per cent of cases, while in 28 per cent there was complete relief.

(4) *Alcohol Injections.*—In 1908 Otto J. Stein of Chicago reported favorable results from the injection of alcohol along the branches of the nasal nerve. The sensory nerves of the nose are derived anteriorly from the nasal branch of the first division of the fifth, posteriorly from the sphenopalatine ganglion. By injecting alcohol into or near these nerves Stein was able to relieve or ameliorate the symptoms in a certain proportion of cases. The technique of the operation presents considerable difficulty in certain cases. Such a procedure would doubtless decrease the sensibility of the nasal mucous membrane, an end which has been sought by other observers by means of cauterizing certain hypersensitive areas on the surface. Killian has cauterized certain areas, the anterior part of the septum, the anterior end of the middle turbinal, the outer wall slightly above the middle turbinal and the upper part of the septum above the tubercle, with trichloracetic acid with favorable results.

(5) *The Climatic Treatment.*—There are certain cases which none of the foregoing procedures seem to relieve. For such cases the only relief possible is the selection of some locality where the pollen season is later than at the permanent residence of the sufferer, and a sojourn there until after the first frost, when return is fairly safe. A sea cruise during the hay fever season offers similar relief. These measures are attended with no little expense and inconvenience. For the individual of limited means they are quite impossible, and the only recourse is the avoidance, so far as possible, of all dust or pollen-laden air, and the relief, as far as possible, of the various symptoms as they arise. Cities, especially the more densely populated districts, will be found more favorable localities than suburbs, country villages and towns.

Among agents which give temporary relief may be mentioned cocaine, eucaine and adrenalin. The former may be mentioned only to be condemned. Whereas it undoubtedly gives temporary relief, the dangers, especially the cocaine habit, arising from its use make its employment impossible. Eucaine, while only half as toxic as cocaine, is a vasodilator rather than constrictor, so it does not give the relief derived from cocaine. It should be condemned for reasons similar to those applying to cocaine. Adrenalin, or the allied extracts of the suprarenal gland, gives marked relief, but unfortunately this relief is only temporary. It is a question, too, whether the congestion after the vaso-constriction has passed is not greater than that preced-

ing its use. But this temporary relief is often a great boon to the sufferer and helps to tide him over until the time when the first frost eliminates the pollen and gives him relief.—*Interstate Journal of Medicine.*

THE COUNTY SOCIETY.

(Many physicians, some of fair professional standing, can see so little good in medical societies that they seldom attend them. We commend to such the following from one who is big enough to be a member of the Royal College of Surgeons —Dr. L. W. Littig of Davenport, Iowa.)

The county society occupies a high place in the factors that make for individual and collective progress. In fact, I firmly believe that the work of a county society is a correct index of the professional attainments of its members and of the character of the service rendered the public. A dead county society is not fulfilling its mission. In order to improve, to keep abreast of the times, medical men must frequently meet in convention to discuss medical topics. No statement needs less corroboration than this, so evident is its truth. These meetings reciprocally stimulate. It is so often said that physicians should join medical societies and do society work to improve the medical profession. I feel very much like saying that physicians should join societies and do society work to improve themselves. Let the motive be selfish, let it be self-improvement, because whatever improves the individual improves the entire profession, and the quality of the service rendered the public, and hence makes for the public good. I am almost ready to confess that I attend medical societies for selfish motives. I always hear something that sets me thinking, that stimulates me to better effort, that makes me try to be a better doctor. I do not attend meetings with the thought of improving the profession. I am not so conceited as to imagine that my presence is essential to the common good. To imbibe new ideas, to receive inspiration, to enjoy the fellowship of my co-workers—these are my motives.

The county society is most important because its meetings are held frequently and because it gives practically every member an opportunity to take an active part. If the members regularly attend the meetings of the county society, read papers as often as the program committee will permit, and always prepare themselves to discuss the papers presented by others, the meetings are sure to be profitable, not only to the individual, but to the entire professional body. The program committee of the county society should always invite case-reports, carefully prepared and accompanied by a brief review of the up-to-date literature on the subject. Simply to report a case without such careful study is not very profitable either to the member making the report or to the society. The best way to stimulate interest in medical society work is to have interesting and frequent meetings. It is much easier to prepare a program a month or two months in advance, and if the subject be announced at least one month in advance every member will have an opportunity to prepare himself to take an active part in the discussions. Every member is interested in the meeting in which he takes an active part. He feels that it was a good meeting, just as the old lady insisted that the prayer-meeting was a most excellent one because she led in prayer. In this state there are several county societies that will serve as models, notably in Ottumwa, Fort Dodge and Lisbon. These societies arrange their meetings months in advance. A little group of men at Lisbon, Linn county, has met every two weeks for the past two years, sometimes with but three (all the doctors in the town) in attendance, sometimes with quite a number of doctors from neighboring towns. The meetings have always been interesting, and they have resulted in much benefit to those that took part. The work of the medical men of the little town of Lisbon may well serve as an example of patient, persistent and successful county effort. A county society which meets but once or twice a year, or which mails its program one or two days before the meeting, is valueless so far as benefiting members is concerned.

The ideal method of conducting society meetings is that adopted by the Wapello County Society. In this county the program for the entire year is prepared and printed at the beginning of the year and issued in a neat little pamphlet. I should urge every county secretary in Iowa to write Dr. J. F. Herrick of Ottumwa (Wa-

pello county) for pointers on county society work. There can be a very good county society wherever four or five doctors can get together once or twice a month. I am not very enthusiastic over members that simply pay their dues but never attend the meetings. I consider them dead, lying high and dry on the bank, and far from the busy stream. Their annual dues are accepted, but they do not stimulate their fellows and are not stimulated by them; they neither give nor receive; they are ciphers in the society and society work. I wish to say here that a county secretary who fails to send a written invitation to each member of the society, immediately after his election, asking when it will be convenient for that member to make his annual scientific contribution to the society, and who further fails to mail the program at least one month before the meeting, is inefficient and incompetent and ought to receive the treatment that the food-fakers planned for Dr. Wiley. The program should be mailed a few days before the meeting, but each program should, in smaller type and less conspicuous display, carry the program of the following month. It is better still to have each program announce the papers to be read the two following months. It stimulates the writer of a paper to have it known that he is under observation; it makes him feel that something is expected of him. This plan gives others ample opportunity to prepare their discussions. I again call attention to the Ottumwa (Wapello county) plan, which is best of all.—*Journal of American Medical Association.*

A foreign body in a bronchus diminishes the respiratory murmur over the affected side. If the body occludes the bronchus, the respiratory murmur will be absent.—*American Journal of Surgery.*

The prognosis in tuberculous diseases of bones and joints in children has been improved more by the practical application of the fresh air treatment than by any other means. The next step in surgical enlightenment is to apply the same treatment to other surgical disease.—*American Journal of Surgery.*

PHYSICIAN'S INCOME.

If the conclusion be reached that we are not making income and outgo even equal, then it is for you to say whether there is; first any logical remedy save an increase in the fees, and second, whether the key to the whole situation is not the question of personal loyalty to each other. No agreement as to the necessity of a change is worth anything if honorable competition is to degenerate into underhand and disgraceful attempts to get the better of one another by sneaking and secret methods. The propositions which I lay down are as follows:

1. We are not getting a reasonable return on our investment.

2. Most of us are unable to adequately provide for the future.

3. These conditions are due to the increased cost of living which has not been balanced by an increase in our fees.

4. No agreement to make our fees uniform to all persons ought ever to be made, because individuals and families differ in their ability to pay. We shall always have to take care of the very poor for nothing, the poor for very small fees, and the moderately well to do with special rates when circumstances demand special consideration.

5. We should, however, raise our fees to those who have themselves benefited by the advance in wages or the prices of the commodities in which they deal.

6. Le us reflect that as a profession we are deficient, if not destitute, in personal loyalty and engaged in a destructive competition long since abandoned by wise men in other avocations. Also, that if we do not mend our ways, worse things will happen to us than now threaten us.

7. Finally, that as a profession we must never turn a deaf ear to the cry of distress. Never refuse to consider the claim of poverty on our charity and ever be willing to suffer wrong, if necessary, rather than surrender the high ideals which have guided us these many years. I believe, however, that by loyalty to each other and a reasonable and just attention to the economic conditions which confront us that we can put the professsion on a sounder business basis without surrendering the legacy of our fathers or forfeiting our claim to the respect of the community. A half starved doctor with a half starved family loses half his ability for public service and more than half his efficiency.

A. T. B.

Editorial in *N. Y. State Jour. of Med.*

When gas comes from an abscess which has been opened in some part of the abdomen, it must not be hastily assumed that the bowel is involved, as many of the abdominal suppurations are associated with gas-forming bacteria. This is notably the case with subphrenic abscesses.—*American Journal of Surgery.*

The West Virginia Medical Journal

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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Editorial

TO WHOM IT MAY CONCERN—"The man who knows all and gets nothing from a medical society, reminds one of that little dried-up miniature of humanity, the prematurely senile infant, whose tabetic marasmus has added old age to infancy."—Osler.

A PROTEST.

The State Medical Association is now composed of more than fifty per cent of the legalized practitioners of the State. No one would be bold enough to deny that the membership embraces the better and more progressive men of the regular profession. The very fact that a man joins this or any medical organization is evidence of his progressive spirit. We do not intimate that there may not be good men outside of the Association, but it has always been true that good, intelligent, progressive physicians are eager to join a medical society, for it is there, in mingling with their fellows and exchanging ideas, that they gain inspiration in their work.

We assert with equal emphasis, that the organized medical profession is as unselfish in its aims as any body of men can possibly be. From the great American Medical Association with its 35,000 members, down to the smallest local society with less than half a dozen physicians, efforts are constantly put forth to educate the people in matters of public sanitation and personal and family hygiene, thus lessening disease upon the prevalence of which the doctor depends for his daily subsistence. Every sanitary movement that was ever inaugurated was engineered by physicians, very often with the opposition of many of the laity. Free counsel on matters of public health and preventive medicine is ever at the service of the authorities, especially when the public safety is threatened or in the presence of an epidemic.

In view of these facts the members of the organized profession have long felt that from its ranks should come the medical appointees of the State. At least twice the State Association has sent to the Governor then in office respectful suggestions to this effect. On one occasion an insulting response was made to our communication. More than once physicians have been appointed to conduct the business affairs and the medical treatment of patients in our Asylums, and to serve on different State Boards, who were lacking in sufficient progressiveness and zeal in their chosen calling to join a medical society, positive proof of unfitness, for every worthy man who has important public professional duties to perform will naturally seek to advance his knowledge by mingling with his fellows in societies, hearing papers read and discussed, and getting in touch with the most advanced ideas and facts in medicine. The official who fails to do this fails to perceive his duty to the public, and should not be retained in office.

Holding these views of public duty, we were greatly surprised on recently learning that the State Board of Control has appointed to the superintendency of the projected State Tuberculosis Sanatorium, a physician who, we are informed, has no medical society connections whatever, although he received his medical degree seven years ago. The fact that he is not a member of his county society leads one

to fear that he is lacking in ambition to improve himself, and if lacking in this respect, we fear he is lacking in the capacity to preside over an institution for the care of the helpless sick. Knowing nothing of his character, however, we are willing to give him the benefit of the doubt ,and concede that there may be local conditions that may have operated against his joining the progressives in a medical society.

In selecting a superintendent for a sanatorium such as we hope our new State institution will become, a man of superior qualifications for inaugurating this work should be sought. He should be liberally educated before entering upon medical study. He should be a graduate of a first-class medical college. He should possess expert practical knowledge and skill in making necessary bacteriological examinations. He should have proven executive ability. The new appointee may possibly possess all of these qualifications, but the facilities for developing such are more apt to be found in the cities than in a village of a hundred population; and if in such a small community he has risen above trying circumstances so as to fit himself for the position to which he has been appointed, he is deserving of special commendation. But granting to him qualifications of high character, we insist that the appointment should have been made from the ranks of those who have been working for years for their own advancement in medical knowledge, and for the public interest as well. The State Medical Association contains a large number of the leading physicians of the State, men ambitious to progress, and who manifest their zeal by regularly attending medical meetings, writing and discussing medical papers, exchanging observations on personal research work and private experience, thus constantly adding to their store of information.

We may say here, that in presenting these views we seek only the best interests of the new institution. We have never heard of any one as seeking this appointment, and hence have no feeling of personal disappointment. But in all of the larger cities of the State are among the younger physicians men of superior ability and tried skill; men who have, in contributed papers and society discussions, shown their familiarity with the latest word in the diagnosis and management of tuberculosis. Why such men have been passed by, and the appointment given to one who, whatever his qualifications, has failed to make himself known to the profession at large by his work, is cause for the suspicion that the appointment is purely a political one, and if so it speaks badly for the future of the new institution. If no entirely fit man can be found in our own State medical organization, then let the Board look to some other medical association, for such will not likely be found outside some such society. The first demand is for fitness It has been intimated to us that sympathy for the appointee, reported to be in ill health, has had something to do with the new appointment. Would it not be better to reserve the sympathy for the helpless patients who are to be sent to the new institution? And, incidentally, true sympathy for a man in ill health would rather leave him to pursue the even tenor of his way rather than to put upon him the cares and responsibilities of conducting a new institution for the treatment of tuberculous patients, a position certain to shorten his career.

In the interest of the projected sanatorium and of the helpless sick who will come within its sheltering walls, we appeal to the Board of Control, without any prejudice toward the new appointee—if indeed an appointment has been made in such quiet and incredible manner, with no opportunity for competition —to reconsider this important matter, or show cause why they have ignored an organization containing more than half of the physicians of the State, who have for many years been unselfishly working in the public interest as occasion required, and but for whose active efforts during a number of years past no Tuberculosis Sanatorium would yet be in sight. S. L. J.

HOT AIR AND DIPHTHERIA.

An editorial in a recent number of the *Journal of American Medical Association* calling attention to the hot air treatment of diphtheria, advocated by Rendu, reminds the writer of a very bad case of diphtheria which he had in his practice long before antitoxin was thought of, and which recov-

ered under a treatment which consisted mainly of inhalation of steam from boiling hops. At the time we thought the virtue was in the hops, but now we must conclude that it was the heat which destroyed many of the diphtheria organisms, and this, with the natural resisting power of the patient, effected the result. Rendu's experiments demonstrated the fact that the bacillus of diphtheria is more susceptible to heat than are most pathogenic germs. He found that an exposure to a temperature of 176° F. for one minute, of 140° F. for 10 minutes, or of 122° F. for 15 minutes, was sufficient to kill the diphtheria organisms. He also found that a person could withstand a temperature of 212° F. for two minutes or a temperature of 140° F. for a period of a half hour without inconvenience. When one remembers that the germs in diphtheria lie mostly near the surface of the mucous membrane of the mouth and pharynx it is not a far-fetched conclusion to say that many of them could be destroyed in this way. Rendu does not suggest that heat be used in place of, but rather as an addition to, antitoxin. The serum attacks the toxin only, which it neutralizes, without, however, destroying the bacillus, which is therefore not prevented from continuing to proliferate. Hence the hot air treatment may be regarded as a valuable auxiliary to the serum.—G. D. L.

We regret to announce the death of Dr. I. J. Taylor, founder and long editor of *The Medical Council*, one of the most readible of our exchanges. The cause of his death was cancer of the tongue. Dr. Thos. S. Blair succeeds to the editorship of the *Council*. He has been an editorial writer on this journal for some time.

Wanted.—Many thanks to the friends who so kindly sent the numbers of the Journal called for in our last issue. We have since had a call for the following numbers for one of the State's Public Libraries: Vol. I. No. 5 and 6, 1907, April, June, July, August, September and December; 1908, June. Send any or all, and accept our thanks. We will forward to the Library wanting these numbers.

A PROTEST.

(The following protest hase been prepared and when signed by the officers of our State Medical Association, will be sent to the Board of Control).

August 23, 1912.

State Board of Control.
Charleston, W. Va.

Gentlemen:—The West Virginia State Medical Association took an active part in the agitation for the State establishnig a Tuberculosis Sanatorium, and we, the officers representing the large membership throughout the State, feel aggrieved that the State Board of Control should go outside of the organized profession for a Superintendent for such an institution; believing that there are many members in our association who could meet the requirements of the institution We would, therefore, protest against the appointment of Dr. ——— on the ground that he has never taken sufficient interest in his profession to become a member of the State Association.

The West Virginia State Medical Society has a membership compised of the very cream of the profession, nearly one thousand in number, throughout the State. The Association has always been found on the right side of every movement and has given its loyal support to all county and State efforts having for their object the public welfare, as it relates to health, sanitary science, and other civic questions.

We feel that you, in your appointment have ignored us, as an organization; and have failed to appreciate the work being done by the organized medical profession to educate the people and create a sentiment that will bring about better civic conditions.

We fail to see any good reason for the appointment of a man to fill this important position, who is not progressive enough to identify himself with the one organization in the State through which he could exert his influence for the advancement of public health.

Yours truly,
WEST VIRGINIA STATE MEDICAL ASSOCIATION,

THE PUBLIC SCHOOL AND PUBLIC HEALTH.

The 9th annual Educational Conference under the auspices of the University Summer School was held at Morgantown, July 19-20. Among the interesting papers read on the above topic was one by Dr. R. I. Reed, of Wheeling, on "The Medical Inspection Law."

A committee on "Creed," composed of State Supervisor L. J. Hanifan of Charleston, Dr. R. I. Reed of Wheeling, Professor A. M. Reese of the University, Principal Wright Denny of Charles Town, County Superintendent W. M. Kennedy if Marion county, Dr. L. S. Brook of Morgantown, and Principal John C. Shaw of the West Liberty Normal School, reported the following, which was adopted by the Conference:

"We commend the present medical inspection

law as a good initiative, leading to better health in schools. We approve the employment of a special nurse as assistant to the inspector. We believe the appointment of inspector should be made at the beginning of the scholastic year.

"We believe in the enactment and strict enforcement of a pure food and drug law for the state made to conform to the national pure food and drug act.

"We condemn the public drinking cup, the public towel and all articles of personal toilet used in common by the public and believe that stringent and effective laws should be enacted by our next legislature to make their use prohibitive.

"We deplore the unsanitary conditions heretofore tolerated in many of the schools of the state, and recommend such legislation as will make proper hygienic and sanitary conditions compulsory.

"We favor the creation of a national department of health.

"We favor a more effective and practical child labor law and believe that provision should be made whereby boards of education may provide for the living needs of a parent or the parents of children who are the only support of the family, while their children are in actual attendance at school.

"Believing that alcoholics and the saloon make for physical, mental and moral degradation, and that the welfare of the children of the state is more vital than revenue to the state, we pledge our unqualified support to the prohibition amendment."—*W. Va. School Journal.*

WE SUFFER FROM LACK OF FRESH AIR

Not One in Hundred Gets Enough, Says Expert.

"Probably not more than one person in every hundred, taking the country as a whole, gets enough fresh air to ward off the ordinary attacks of dangerous infectious and contagious diseases," says Dr. Livington Farrand, Executive Secretary of The National Association for the Study and Prevention of Tuberculosis, in a statement issued today from the association's headquarters in New York.

"People," continues Dr. Farrand, "fail to get enough fresh air either because their lungs or other respiratory organs are affected, or, more generally, simply because they do not open the windows and doors. For the former class a physician is needed, but for the latter, plain directions on how to live, work, play and sleep in the open air will do more than hospitals and drugs.

"To meet the need of this latter group—not especially those who are sick but those who are seemingly well—the National Association has prepared a handbook on 'Fresh Air and How to Use It,' written by our expert Dr. Thomas Spees Carrington. This book is designed to prevent tuberculosis by showing those people who have no trace of the disease how to ward off the attack of consumption by living and sleeping in the open air. Failure to get enough fresh air by working and sleeping in poorly ventilated, overcrowded rooms is one of the most prolific causes of tuberculosis and also of a host of other infectious diseases. This free gift of nature is probably the world's best medicine not only in the treatment, but also in the prevention of disease.

"Our new handbook on this subject, tells how anyone can obtain fresh air in the home, the shop, or the schoolroom at a cost ranging anywhere from $1.00 to $1,000 or more, according to the elaborateness of the equipment desired."

While we cannot afford to distribute the book itself free of charge, we will send to anyone an illustrated synopsis or summary of it, entitled "Directions for Living and Sleeping in the Open Air," on request at our office, 105 East 22nd Street, New York City.

In out Outlook department is an abstract showing that harm follows the use of the ice bag in appendicitis. Heat is preferred by many.

In applying heat whether it be for peritonitis or inflammatory conditions of a more superficial character, the most rational method is to use that which is not only sanitary, but, for the comfort of the patient does not require frequent changes. In this respect, antiphlogistine, on account of its heat retentive properties, its cleanliness, and its ease of application, should appeal to the professional mind. That antiphlogistine has proven of great therapeutic value as a thermic agent is best indicated by its extensive professional employment and its many advantages over the hot water bottle and other methods of application of heat is ready discernible.

State News

Dr. C. E. Johnson, late of Nestorville, has located at Shenandoah Junction.

* * *

Dr. J. S. Biddle has moved from New Haven to Charleston.

* * *

Dr. C. C. Hogg, of Huntington, is in charge of the Medical Department of the State Guard at Paint Creek.

* * *

We regret to learn that Dr. Rader, of Huntington has not recovered his health. He has, for some time, been sojourning at Webster Springs. He is a sufferer from asthma.

* * *

It is reported that Dr. A. F. Haynes, of Huntington, has disposed of his practice and will locate in Texas.

* * *

Dr. John D. Myers, of Huntington, has recently suffered a cerebral hemorrhage and is still quite ill.

* * *

Dr. Noome of Wheeling, W. Va., has just returned from a two weeks' visit to the Mayo Clinic.

Society Proceedings

THE CABEL COUNTY SOCIETY.

HUNTINGTON, W. VA., August 19, 1912.

On the 8th of August we held a meeting in the Hotel Frederick. This was the first meeting since June.

Dr. Edwin S. Miller of Philadelphia read a paper on "The Bacterins and Sera." The paper was certainly a very instructive one as well as interesting.

After the meeting lunch was served in the cafe.

I am enclosing to you a copy of a resolution drafted by the committee appointed by the president at the June meeting. The resodution explains itself, and we trust that you may find room to publish it in the next issue of the Journal.

WHEREAS: It has pleased Almighty God to call from the scene of his labors, our worthy friend, Dr. Edwin S. Ricketts, of Cincinnati, Ohio, and

WHEREAS: Our profession has hereby lost an esteemed councillor, an honorable and upright member, therefore be it

RESOLVED: That it is the expression of this Society that we feel the loss of our friend, and deeply sympathize with his relatives in their bereavement.

RESOLVED: That a copy of these resolution be spread upon the minutes of this Society, and that a copy be sent to his son, H. M. Ricketts, of Covington, Ky.; to his brother, Dr. B. Merrill Ricketts, of Cincinnati, O.; and to The Journal of The West Virginia State Medical Association, with the request that it be published therein.

C. C. HOGG,
R. H. DUNN,
JAS. R. BLOSS, *Committee.*

Fraternally yours,
J. R. BLOSS, *Secy.*

MERCER COUNTY SOCIETY.

BLUEFIELD, W. VA., August, 30, 1912.

Editor W. Va. Journal:

A meeting of the Mercer County Medical Society was held in Princeton, August 20th: Dr. H. R. Fairfax, President, being absent, Dr. W. H. St. Clair, Vice President occupied the chair.

Dr. O. S. Hare read a very interesting report of an obstetrical case which was of unusual interest and occasioned many other members to recite interesting cases occurring in their practice. Then Dr. C. A. Johnston read an interesting paper, "The Relation of Skin Specialist to General Practitioner," which stimulated much interest and occasioned considerable argument.

After business session was over the Society was given a delicious luncheon at Hotel Perkins by the Princeton doctors.

This meeting was the most interesting and successful one we have had for many months.

September 14th, is the date for our next meeting which will be held at Mercer Healing Springs, Athens, W. Va.

W. C. SLUSHER, *Secy.*

Reviews

SURGICAL AFTER-TREATMENT—By L. R. G. CRANDON, M. D., *Assistant in Surgery at Harvard Medical School,* and ALBERT EHRENFRIED, M. D., *Assistant in Anatomy at Harvard Medical School.* Second edition, practically rewritten. Octavo of 831 pages, with 264 original illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $6.00 net; half morocco, $7.50 net.

The demand for a second edition within so short a time is evidence of the cordial reception this admirable treatise has received.

The very high standard established in the first edition has been maintained throughout the second, and we note many important additions in the book before us.

We can say without hesitation that for thoroughness, wise post-operative counsel and descriptive detail this work is not only a masterpiece, but it stands in the forefront of English works on surgical treatment.

We believe Dr. Crandon's book can be taken to the bedside with the full assurance and confidence that it will afford invaluable assistance, recognizing, as it does, every complication of surgical convalescence and offering specific direction, which, if followed, will strengthen the right arm of the surgeon and bring material comfort to the patient as well.

As has been pointed out in the preface to the first edition, every procedure advised has stood the test of practice and will safely do for the reader until from his own experience he develops his own methods.

The fact that each surgeon eventually develops a technic peculiar to himself, and that many differing ways are successful, should make us liberal in spirit and constantly alert for new truth. No surgical life is so brief but that it has seen new methods appear, vaunted as perfect, pursued for a time, only to fade away. It is fortunate therefore that statistics are given little place in Dr. Crandon's book.

This book should be purchased by every hospital receiving surgical cases, and placed in the hands of its internes. As for the man out in the active field, it will soon be a much-used companion on the "five-foot shelf."

FRANK LEMOYNE HUPP.

SPONDYLOTHERAPY, Physio-therapy of the Spine, based on a study of clinical physiology. By ALBERT ABRAMS, A. M., M. D., *University of Heidelberg, F. R.* M. S., third edition, enlarged. Philopulus Press, San Francisco, 1912.

This is a most remarkable book, containing a wealth of information not to be found in any of the more popular text books. Much of the work is original with the prolific author, and deals with physiological facts and their application in the treatment of various disorders of the viscera and other structures. The author lays great stress on the elicitation of the so-called visceral reflexes, *i. e.*, modifications in the size and form

of the different viscera, on irritation, mechanical or electrical, of certain areas of the skin, but especially of the spinous processes of certain vertebrae. Thus he shows that the irritation over the spine of the seventh cervical vertebra is followed by contraction of the heart, as shown by percussion and X-ray, and this "heart reflex" is used successfully in the treatment of dilated heart. Again, the irritation of the ninth to eleventh dorsal vertebra brings about a dilation of the heart chambers, and this fact is made use of in the treatment of angina pectoris where, it is claimed, there is often immediate relief on tapping or sinusoidalization of the ninth to eleventh vertebra. Irritation of the seventh cervical again is said to be followed by a contraction of the wall of the aorta, and the startling statement is made here that by the repeated tapping or sinusoidalization of this vertebra the author has brought about a symtomatic cure in 13 cases of abdominal aortic aneurism, *i. e.*, a cessation of the pain and other disagreeable symptoms, a diminution of the growth of the aneurism, and in some cases a disappearance of the tumor. If this prove to be correct, we would have a most simple, safe and dangerless remedy in one of the most serious and intractable conditions.

In similar manner the author claims to have improved and cured cases of Graves' disease, of dilatation of stomach, of intra-abdominal insufficiency and many other conditions. In the chapter on backache there is a very helpful discussion of the various conditions liable to produce pain in the back and the treatment of these. A very novel method of treating whooping cough is given as follows: Tap the seventh cervical vertebra "by a number of blows as strong as the child can tolerate without flinching and repeat this three times a day, each seance lasting five minutes." It is claimed that pertussis has been thus cured in two weeks.

The book is full of such novel and simple suggestions, and to appreciate it one must read it from first to last page.—SCHWINN.

PELLAGRA—By STEWART R. ROBERTS, S. M., M. D., *Associate Professor of the Principles and Practice of Medicine, Atlanta College of Physicians and Surgeons. Atlanta, Georgia; Physician to the Wesley Memorial Hospital; formerly Professor of Biology in Emery College.* Illustrated; 272 pages. Cloth, $2.50. C. V. Mosby & Company, St. Louis, Mo., 1912.

It has not been my pleasure to read a medical book more satisfactory than this small volume. The author writes with a style that is delightfully direct. He approaches his subject with the confidence of a master, and gives in the fewest possible explicit statements the pith of all that he has gleaned upon Pellagra in years of study and experience both in America and European countries. He discusses every phase of the subject from its earliest history down to the present time. He begins at the beginning and ends now. He advances no theories, but impartially discusses the theories of others. The author is a past master at concentration, and I conceive it practically impossible to put more in the same space than Dr. Roberts has put into this spicy little volume. One might properly term it *"Multum in Parvo."*—A. A. S.

INTERNATIONAL CLINICS—A quarterly of illustrated clinical lectures and special articles. Vol. 2 of 22d series. J. B. Lippincott Co., Philadelphia. $2.00.

A cloth-bound octavo of over 300 pages, filled with the latest information on all the branches of medicine, including eugenics, which is discussed by Dr. Meyer Solomon in a paper of 25 pages. The Present Status of Epidemic Poleomyelitis is presented by Simon Flexner; Spondylothraphy by Albert Abrams; Some Problems in Neurology by Harrison Mettler; Management of Sunstroke by Simon Baruch, and many other topics are treated by men of equal prominence. Many illustrations are introduced. This volume is fully up to the high standard set by previous volumes.

PELLAGRA—By GEORGE M. NILES, M. D., *Professor of Gastro-enterology and Therapeutics in the Atlanta School of Medicine*, Atlanta, Ga. Octavo of 253 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $3.00 net.

Dr. Niles takes up Pellagra and first considers it from an historical standpoint; he discusses pallagra in the United States; also discusses its etiology, symptomatology and clinical course. He gives some clinical reports and descriptions of cases of pellagra. He devotes two chapters to the pathology, morbid anatomy, diagnosis, course, progress and prognosis.

He also gives a discussion on the different methods of treatment and the prophylaxis as well as some deductions from recent experiments on animals. The book is well written and is a very readable work—B. B. W.

THE CARE OF THE SKIN AND HAIR—By WM. ALLEN PUSEY, A. M., M. D., *Professor of Dermatology in the University of Illinois.* D. Appleton & Co., New York, $1.00.

This little book is written for the laity. It is a plain discussion of the structure and physiology of the skin, with instructions as to its proper care. The author's aim is not to teach the treatment of skin affections, but how to prevent them, how to care for the skin and hair, and how to prevent simple affections from becoming serious ones. Every intelligent family should possess some such book as this, and the reputation of the author is such that one may be confident that the instructions here given are reliable.

AN ESSAY ON HASHEESH, including observations and experiments by Victor Robinson. Medical Review of Reviews, 206 Broadway, New York, Price, $.50.

This is a very entertaining and well written booklet, giving the origin, history and effects of Cannabis Indica, with the author's observations on his personal experience with the drug on himself and several friends. Very readable.

Medical Outlook

THE ICE BAG IN APPENDICITIS.

In a most interesting article by A. M. Fauntleroy, Surgeon of the United States Navy, Medical Record, August 3, 1912, the fact is brought out, basing the same upon a large number of cases of appendicitis operated, that the ice bag is positively harmful in this condition. In 50% of the cases operated, where the ice bag was used, the condition seemed to indicate that there was a noticeable lack of effort on the part of nature to wall off from the rest of the abdominal cavity, the appendix, which was frequently very much congested, gangrenous or perforated He also observed that in the ice bag cases there was a surprisingly low white cell count when one took into consideration the condition found in the abdomen at the time of the operation. From 8,000 to 11,000 white cells was the rule in these ice bag cases when one would be justified in saying that the pathological condition warranted a constitutional reaction of from 20,000 to 30,000 leucocytes, or even higher.

On the other hand, in those cases in which the hot water bag or morphine had been used prior to operation (the ice bag not being used at all), the white count corresponded to what one would expect. Dr. Fauntleroy advances from his findings the logic that while the ice bag causes numbness, practically the same as in the condition of frostbitten ear or toe, it also decreases hyperemia, leucocytosis and stasis in the part to which it is applied. That heat is the direct antithesis of cold in encouraging favorable physiological action in inflammatory processes, whether superficial or peritoneal, seems to be from his report most logically and conclusively proven.

REMARKABLY SIMPLE TREATMENT OF SCARLET FEVER AND MEASLES.

In the *British Medical Journal*, date of September 2, 1911, the following remarkably simple treatment is described by Milne, who states that in 800 cases thus treated not one developed any of the usual complications, such as disordered glands, kidneys, etc. In four weeks patients are as well as they were in eight by the old system:

As early as possible in the disease, and without waiting for definite confirmation of the diagnosis in doubtful cases of scarlet fever or measles, the tonsils and the pharnyx, as far up and down as possible, are swabbed with 10 per cent. carbolic oil every two hours for twenty-four hours, or for longer if the swabbing cannot be carried out regularly. Rarely is it necessary to continue the swabbing for longer than this. The swab should be of cotton-wool, firm, the size of the distal phalanx of the patient's thumb, held in a forceps, or fixed to a piece of wood by a thread. A fresh swab should be used on each occasion. The carbolic oil has the great advantage of relieving pain and enabling the patient to swallow more easily. In addition, the patient is gently rubbed all over with pure eucalyptus oil, from the crown of the head to the soles of the feet. This is done as soon as the patient is suspected of scarlet fever or measles, or as soon as he is found to be suffering from either of the diseases. This inunction with oil of eucalyptus is repeated morning and evening for four days, and once a day for the six days following.

THE DIAGNOSTIC IMPORTANCE OF HEMOPTYSIS.

Dr. Bartlett draws the following conclusions from his study of hemoptysis:

1. Bleeding from the upper passages must be ruled out by careful inspection and history.
2. Hemoptysis may occur in certain constitutional or blood diseases as merely another manifestation of the general tendency to bleed.
3. Hemoptysis frequently occurs in broken compensation in heart disease.
4. Ninety per cent of all hemoptyses are tuberculous. As a rule definite signs and symptoms are present. Not uncommonly, however, they are in abeyance for months or even years.
5. Hemoptysis may occur in any ulcerating or eroding pulmonary disease. It should, therefore, be expected in abscess, gangrene, bronchiectasis or pulmonary cirrhosis.
6. Memoptysis in pneumonla, bronchitis, asthma or following trauma should lead to the suspicion of an underlying tuberculous process.
7. It is very doubtful if vicarious menstruation or hysteria can produce hemoptysis in normal lungs.
8. Hemoptysis occurring without warning in young and healthy adults, and passing off without the development of further signs or symptoms of tuberculosis is probably of tuberculous origin and should be so treated.
9. Broncho-pulmonary hemorrhage without definite symptoms or signs of cardiac or ulcerative pulmonary disease is due in nearly every instance to tuberculous infection, which is merely another way of saying that hemoptysis should be considered as due to pulmonary tuberculosis unless proved to be due to some other cause.—*Boston Med. and Sur. Jour.*

THE DOCTOR'S DECALOG.

1. Don't waste your time. Be doing something every minute.
2. Strive to make a good impression. Dress well. Learn to talk well . Be a man among men.
3. Be a courteous professional gentleman, but also a square-deal-giving and a square-deal-demanding business man.
4. Buy books. Subscribe for the journals, and write for them. Attend the societies, and let your voice be heard.
5. Equip yourself with every material thing that will increase your diagnostic and therapeutic power.
6. Don't be ashamed to consult with other men. Give them of your knowledge, and extract from them every fact of possible value to you.
7. Be a real and not a pseudo investigator. Take nothing on faith, but refuse nothing because it is condemned.
8. Make every case a subject for real research

work, and leave no fact concerning it unknown that is capable of being uncovered.

9. Shun quackery as you would poison; but ascertain its sources of strength, adding the latter to your store.

10. Wear no man's collar. Let truth, honor and manhood be your only masters.—*Am. Jour. of Clinical Medicine.*

THE ADRENAL GLANDS.

Prof. Hoskins of the chair of physiology in the Starling-Ohio Medical College, in reviewing this subject in the March issue of the *Cleveland Medical Journal* has this to say:

"The adrenal glands, while they have been known anatomically for nearly four centuries are, physiologically speaking, almost a novelty. Like the other ductless glands, they have been the objects of endless fanciful speculation, but the first significant clue to the mystery of their function was obtained by the physician Addison when, in 1855, he discovered their relation to the disease that bears his name.

The most important question now to be answered in regard to the adrenals is: 'How are they controlled?' Considering the facts that the active principle of the glands exerts an appreciable influence in dilutions of 1 :500,000,000 and that this influence is exerted in the so-called 'vital organs,' it is a matter of considerable interest as to when and under what conditions this highly potent substance is being contributed to the blood stream. Another question of interest is whether the peculiar relationshop between the adrenals and the sympathetic nervous system is of constant utility, that is, whether the glands exert a constant tonic influenc upon the system or whether it is merely mechanism for times of special stress."—H.

TREATMENT OF SEPTIC ABORTION.

Dr. E. O. Houck, of Cleveland, in dealing with the subject of septic abortion, particularly with cases demonstrated to have arisen from hemolytic streptococci, says: "The employment of vaginal or uterine packs in the treatment of abortions should be greatly restricted because they favor infection. That in the presence of a virulent infection the expectant plan of treatment offers the best results. That where such expectant plan is followed the virulent organisms disappear in from one to three weeks, when the uterus may be safely evacuated.

There are many doctors who curette every abortion case without any particular reason for so doing, except that the patient has aborted. No one, I think ,will justify this course. I think, too, all well-informed physicians will agree that the uterus should be carefully and completely emptied whether digitally or by means of a blunt instrument in the presence of a serious hemorrhage, whether the patient is septic or not, but in the absence of hemorrhage conservatism should be the watchword. The curette in the presence of active uterine infection means pelvic abscess, an exacerbation of the whole clinical picture and often an *exitus lethalis.*"—H.

HODGKIN'S DISEASE.

JEWETT V. REED, M. D. in *Indianapolis Medical Jour.* July 15.

The variety of this malady, with its diagnostic difficulties, in Reed's opinion, warrants a review of the condition with report of a typical case. A negro, not 30, swellings in neck, which began 8 or 9 years ago with a moderate enlargement on right side of neck. A year later a similar enlargement on left side, 5 years later a swelling under each arm ,and a year ago enlargements of inguinal glands began. No tubercular history. Had gonorrhea at age of 16 and mumps and measles when a child.

No pain or tenderness, swelling restricted to lymphatic glands which vary in size from a pea to a hen's egg and freely movable. No scars or sinuses in overlying skin. Tonsils, spleen and liver not enlarged. Temperature persistently normal, chest organs negative. A mild prostatitis from old gonorrhea. Wasserman reaction negative. Hemoglobin 85 per cent, white cells, 5,500 polymorphis, 71 per cent, large mononuclears, 16 per cent, small mononuclears, 7 per cent, transitional cells, 3 per cent, eosinophiles, 3 per cent. The diagnosis lies between syphilis, tuberculosis, lymphatis leukemia and Hodkin's Disease. Syphilis ruled out by the size of glands and neg. Wasserman. Blood examination excludes lymph, leukemia. Between tubercular adenitis and Hodgkins disease there is much difficulty. This case was decided in favor of the latter because of the soft elastic feel of the glands, their discreteness, morcebility and want of adhesion to other structures, the extension of glandular enlargement from neck to axillary and inguinal, and the absence of caseation and sinuous formations and other tubercular lesions. 8 months treatment with iron and arsenic caused the inguinal enlargements to disappear and reduced the cervical and axillary to half former size.—G. D. L.

CONSTIPATION.

Constipation is a subject frequently discussed in medical societies and the current literature of the day, yet the number of failures following its treatment is surprisingly large. The failures are due in part to the fact that physicians too frequently prescribe remedies or advocate methods which offer temporary relief because they secure an immediate evacuation, but which accomplish little toward effective and permanent cure. Other physicians fail to cure their patients for the reason that they do not familiarize themselves with the different methods of tested value in the treatment of this affection; again, they are unsuccessful in the handling of their cases because either through ignorance or indifference, they fail to educate the patient as to his manner of living and the proper hygiene of the bowels SAMUEL GOODWISE GANT, M.D, L.L.D.

G. D. L.

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ORATION IN SURGERY—THE SURGERY OF OUR OWN COUNTRY.

By E.W. Strickler, M. D., Kingwood, W. Va.

(Read at Annual Meeting State Medical Association, July, 1912.)

I feel that our president could have displayed personal wisdom and fraternal charity by assigning this very important place on our program to some one more capable than myself of dealing with matters surgical. As an apology for Dr. Henry's judgment in conferring honors, and my own audacity in accepting unmerited distinction, I wish to explain that I am simply acting in the capacity of a substitute for Dr. J. E. Rader, on whom this honor was first and wisely conferred. Had it not been for the unfortunate illness of Dr. Rader, this society would have been enlightened today on the evolution of surgery from the resection of Adam's rib down to the formidable extraction and transplantation of the human brain by our own distinguished Harvey W. Cushing. You would have had concise reports of the advancements in the art and science of surgery in England, France, Germany, Austria, Italy and other foreign countries accurately traced from the days of Billroth, Pean, Volkman, Virchow, Rokitanski and many others of the pioneer type, down to the latest achievements of Lane in bone surgery, Krause in brain work, and even the new ideas of Keastle, which are so fast revolutionizing our present understanding of intestinal peristalsis.

The new German decompression operation, known in that country as Balkenstich, would no doubt have been explained in detail. Unfortunately, what I know of the great masters in foreign countries has been gleaned from the current magazines with which you are all familiar. However, if we may limit our eulogy to the progress of the last twenty years, I believe our own country has made the greatest surgical development of any nation in the world, and that it is no longer necessary for us to cross the great Atlantic in seach of surgical knowledge. Our confreres in the East are beginning to look westward, and to recognize with interest and admiration the advancements of the new country. The rapid development of well equipped hospitals throughout the country, the advanced standard of medical education, with all of the improved methods of teaching, the establishment of the Clinical Congress of Surgeons of North America, and our very efficient system of trained nursing, have gained for us the recognition and admiration of most of the older countries. However, there is one thing we must admit, for the present at least, and that is the notable fact that Austria and Germany are still leaders in the laboratory, as well as the necropsy. Our post-mortem work in this country is shamefully neglected and our lack of interest in the laboratory accounts for most of our shortcomings in diagnosis. Under present conditions there is no reason why we should lag behind in these important subjects. Our American colleges, both under-graduate and post-graduate, are fully equipped with laboratories and laboratory instructors, equal in

every way to those in foreign countries, and adequate to meet every demand. Right in our own beloved West Virginia University, embryology, biology, histology, bacteriology, pathology and even physiological chemistry are as well and comprehensively taught as anywhere in the world. In fact, the entire curriculum of the first two years of a medical education as given in our State University is practically faultless. It might therefore be inferred that I am not exactly in sympathy with the attitude of the Board of Regents in their effort to abolish this very desirable function of our State Institution.

The student of the present generation has every facility, right in our own country, with which to build a solid foundation sufficient to carry a superstructure of medical and surgical knowledge far greater than our imaginations can picture, but it must be remembered that personal application, perseverance, industry, and much self-denial on the part of the student are necessary if he expects to achieve greatness. Neither the teacher, the laboratory, nor the clinic will be sufficient to perpetuate the present rate of surgical advancement without the co-operation of earnest, diligent students, mentally endowed. We must also have the moral support of the community and the legal and financial support of the government before we can hope to realize idealism in the practice of surgery. With every facility at hand, as it is today, it is only reasonable to demand a much higher degree of proficiency of the next generation of surgeons. It should therefore be the self-appointed duty of all of us, who are ripe in experience, but humiliated by our own ignorance, to explain in detail, to every young man or woman who aspires to enter the profession, the actual drudgery incident to obtaining a thorough medical or surgical education, and to discourage, in every way possible, all who are deficient in preliminary education, as well as those who do not seem to possess "that adequate amount of mental reserve fund" so frequently referred to by Dr. Osler. We sort our cattle for the stock farm, the dairy and the meat market, our horses for the brewery wagon and the race track. Why not use the same judgment in improving the quality as well as the usefulness of our profession?

Another matter which I believe is open to criticism in this country, is the attitude of the profession regarding anaesthetics. It is not within the scope of this paper to discuss the various drugs employed to produce anaesthesia, neither as to their physiological action or mode of administration. But considering the four anaesthetics in general use, and the three methods of their administration, there is no one drug or single mode of administration that is applicable to every case, and when the question of making the choice confronts us, it is right there that the skill, judgment, and experience of the professional anaesthetist can be most profitably utilized. Most of us seem to think that the management of the anaesthetic is the most subordinate position in a surgical operation. The one object of placing the patient in a state of profound unconsciousness and thus maintaining him until the proposed operation is completed, is generally regarded as the finished duty of the anaesthetist. If the person in charge of the anaesthetic is licensed to practice medicine, he is absolutely exempt from any moral or legal censure, no matter what may be the immediate or remote results of his work. But in case he is not so licensed and the results are disastrous, we feel at liberty to shift responsibility by criticising the ignorance of the anaesthetist when we ourselves are to blame for entrusting a duty so important to an incompetent person. It is my judgment that the anaesthetist assumes a position of responsibility equal in every way to that of the surgeon, and that his knowledge, training and experience should be quite as proficient.

Every hospital, large or small, should have one or more well trained anaesthetists, selected with care from the ranks of the profession, and not from the nurses' training school, as is sometimes the case. A competent anaesthetist, who knows well the physiological action of the drugs he employs, and the technique of their administration, is certainly in a position to know best when to shift from one anaesthetic to another, or to decide the question of medication before, during or after the operation. I therefore insist that surgical narcosis is

an important feature in surgery, and that a high degree of proficiency should be demanded of those entrusted with its management. Just where the duties of the anaesthetist begin and end is a question open to discussion. Personally, I believe the limits should be wide, and that surgical anaesthesia should be regarded as a specialty, and that the specialist should have a just and adequate remuneration for his services direct from the patient, and not from the surgeon or the hospital, which in either instance would mean the minimum fee.

Before leaving this topic I wish to avail myself of the only excuse I can find to eulogize old England. For many years the giving of anaesthetics in England has been regarded as a medical specialty, and if I am correctly informed the practice in that country is now conducted on a strictly scientific basis. From such earnest workers as Frederick Hewitt we have learned practically all that we know about accurate dosage and the physiological action of anaesthetic drugs. It seems that the introduction of the vapor of ether into the field of general surgery by the Boston dentist (Dr. Morton) nearly sixty-six years ago has practically satisfied the world's demand for a general anaesthetic, and but little of real value has been gained since that time in the way of anaesthetic measures. The combination of nitrous oxide gas in definite proportions with oxygen as brought forward by Prof. Andrews of Chicago forty-four years ago does not seem to offer many advantages over the routine use of ether. Although the reports of Dr. George Crile of Cleveland, Dr. James T. Gwathmey of New York, Dr. Willis D. Gatch of Baltimore, and Dr. Cotton of Boston would lead us to believe that in the combination of the gases we have found a safe, easy, non-poisonous anaesthetic much to be preferred to ether or chloroform. But when we come to consider the very expensive, complicated and uncertain apparatus required in the administration of the gases, and the reported fatalities from its use, we can but conclude that ether is still our most practical anaesthetic, at least until some more accurate mechanical device is brought out for the control of the gases, and better trained anaesthetists are produced.

Dr. John B. Roberts of Philadelphia has made the statement that one of the early symptoms of appendicitis is a congestion of the base of the right lung, caused by spasm of the diaphragm and other respiratory muscles on the right side. If it is true that we have such a condition to deal with in a disease so common, and so decidedly surgical as appendicitis, I hope it will be to the glory of some member of this society to search out a safe anaesthetic that will be less irritating to the lungs than ether, and less complicated in mode of administration than the combined gases.

In drawing a comparison between the American surgeon and the surgeon of other countries, the most striking difference seems to be in the process of development. In this country there is neither moral nor legal restrictions to the practice of surgery. Any one who is licensed to practice medicine is also licensed to practice surgery to any extent or degree that he may deem himself competent. In most of the older countries conditions are quite different. The student who leaves the college with his doctorate degree and at once enters into the general practice of medicine is seldom able to establish a surgical practice, and can never attain to the distinction of a hospital surgeon. It seems to be an unwritten law in European countries that those who expect to engage in a specialty of any kind are required to come up to it through a long and unremunerative course of hospital training, advancing step by step in rank as well as knowledge, until at length, by a sort of hierarchy he may become chief of a clinic. While it goes without saying that such a system would insure a high degree of proficiency, and would no doubt create a more uniform standard of surgical ability, it would certainly be manifestly unjust to the diligent student and thwart the career of a great many worthy and highly competent surgeons. However, I do believe there should be some special requirements made of persons who assume to do major and elective surgery in any country. I do not regard it as essential for the prospective surgeon to spend any time in France, Germany or other foreign country, as our clinical facilities in this country are adequate to develop surgeons of the highest type.

In some sections of this country there seems to be a spirit of avarice cropping out, ostensibly as a display of personal conscientiousness, but in reality it is an appeal to the general practitioner to disregard the smaller hospitals of the country, as well as the surgeons who are associated with them. One of these *intensely* conscientious critics writes trus: "Within a few years it has become quite the fashion to establish hospitals in all medium-sized communities, and in some towns that could be called scarcely more than villages. The financial support of these hospitals is usually such that their equipment and supplies are necessarily meager. The surgeons in charge are general practitioners who have had no more training for abdominal work than that which they get from a brief post-graduate course in some large city. Their operative mortality is necessarily large. Many cases are saved, to be sure, or perhaps more correctly, are not lost, but the mortality is so large, that Dr. Joseph Price, of Philadelphia, whose field of observation is phenomenally broad, says that the average operative mortality today is fully as large as it was in the days of the pioneers. His statement, I presume, is somewhat of an exaggeration, but is approximately true. Not only is the mortality large, but the morbidity is also large, this being the natural consequence of imperfect and incomplete work." As this critic is neither young nor wise, I feel sure that Macauley had him in mind when he said, "Avarice is rarely the vice of a young man; it is rarely the vice of a great man." As a matter of fact, this man began the practice of surgery in his dotage, with but little, if any, preliminary training, but nevertheless he is chief of a medium-sized surgical clinic. Another of the same ilk, who for some mysterious reason holds a position as clinical instructor in a large public hospital, was attempting to demonstrate the Lane kink of operation to an audience composed largely of experienced surgeons. With the patient's bowels protruding through a large abdominal incision, and fully an hour and a half under ether, all operative demonstrations were suspended. With one conceited stare at his audience, he said, "Gentlemen, you will see in the literature that this operation carries with it a mortality of from seven to ten per cent. But bear in mind, gentlemen, that these statistics were not compiled by the 'novice' or the 'occasional operator.' In fact, I know of no instance in which this operation has been attempted by any one except a recognized master in intestinal surgery. I would not advise any of you gentlemen to attempt an operation which is surrounded with so great a hazard. This operation in the hands of an 'occasional operator' would be in reality little short of wilful murder."

We learn from the Scriptures that Job was a man of wonderful patience, but it seems when he encountered this type of imbecility his patience failed him, and he said, "Great men are not always wise: neither do the aged understand judgment." This audience was composed of men somewhat on the plan of Job, and like Job of old, they said, "Hearken unto me; I also will show mine opinion"; and that opinion was freely and publicly expressed in about this language: "He is the most bungling operator I ever saw. His technique is sloven and absolutely disorganized. He is an outrage on the community and a burlesque on surgery."

Such men as I have just described try to impress the profession as well as the laity, with the belief that the practice of surgery should be limited strictly to the appointed professor, as it is in European countries, and that all others should be restrained from doing operative work, regardless of skill, training or other qualifications. Under such a system it would have been impossible for the Mayos to ever develop their naturally endowed surgical abilities. Their little village with a population of only 7844 would have been regarded as an unsurmountable obstacle to the achievement of surgical greatness.

I rejoice in the fact that I am an American, and that "Free America" recognizes no priestly hierarchy, and that genuine merit may assert itself at any time for its true and actual value.

The truly *great* surgeons of this country are extremely liberal in their concessions to the progressive student. In direct contrast to the selfish attitude of the two surgical bigots just described, I wish to quote briefly from a man who stands top-gallant on the ladder of surgical fame, and who as

a teacher, operator, technician, author and humanitarian, has no superior on land or sea. His name is John B. Murphy. In speaking of surgical freedom to a body of post-graduate men, Dr. Murphy said: "Gentlemen: You have a right to assume to do any operation that has ever been done, and some that never have been done. but not until you have been to the dead-house and the dog-house. Before attempting my first operation on the Gasserian ganglion I went to the dead-house and opened up seven skulls. When I had fully assured myself that I could do the operation correctly and with comparative safety, I made my operation on the living human subject, and I believe my first operation was my best one." Could any one display a more honorable and conscientious spirit? He emphasizes the importance of knowing your work well, and points out the only avenue to that end, viz., the dead-house and the dog-house. Surgery is not learned from reading books and journals, nor from witnessing operations in the public clinics. Operative work on the cadaver and experimental operations on the dog or other animal, is an indispensable part of a surgical education, and until the student is proficient in this work he will get but little from the clinic that will be of practical value to him. Regarding the alleged statement of our lamented Dr. Joseph Price, of Philadelphia, "that the average surgical mortality of today is as large as it was in the days of the pioneers," I have but this to say: Notwithstanding the ever widening field of operative work, the bold invasion of the upper abdominal cavity, the lungs, deep-seated glands, including the many operations for advanced malignancies, the average surgical mortality is reliably estimated at something less than eight per cent.

If some one would take the trouble to separate the necrology of the self-styled masters from that of the "occasional operator," "novice," tyro, etc., (as these pseudo-masters are pleased to call their competitors), I do not believe the difference would be so striking as some of these masters (?) would have you believe.

In conclusion, I wish to explain how I first became interested in surgery, and I trust this explanation will be accepted as an apology for my present state of confusion. Very early in life I was employed as a drug clerk. I watched the cure-all prescriptions of our home physicians with great interest. I had a small pocket ledger in which I copied a large number of these prescriptions, believing that at some time they would be of great value. A little later I decided that it would be advisable for me to attend a medical college, in order to learn just when, where, and how to make application of these priceless formulae. My father, who was a practitioner of the Eclectic system, advised me to discard my little book of life-givers and life-savers and to adopt his system, which was so notably free from uncertainties and disappointments. A little over two years of college work transformed me into a full-fledged Eclectic physician. With a pair of saddle-bags chuck full of the "Sure Cures" and a head fuller of blind credulity, I made my assault on the public. I had not been long in practice when I learned that charcoal was not a dead sure cure for intestinal hemorrhage, and that tincture of the honey bee would not cure every case of cystitis, pruritis or any other itis. I was even a trifle skeptical about the specific action of spider-web in the treatment of the intermittents, so I turned my ship of fortune eastward, and anchored in Baltimore, where I spent three winters in search of the royal road to the management of human ills. Surgery seemed to offer the greatest attractions ,and as I believed, was free from uncertainties and disappointments. So I decided to take in the whole field of surgery, and style myself a General Surgeon, and thus represent a true and fixed science. It was not long until I discovered that surgical diagnosis was almost as important as surgical dexterity. In order to meet this contingency, I brought to my assistance the microscope and the x-ray, only to realize that I would require an interpreter to explain their findings. Thus I found myself much in the same predicament as the old man who, in a state of intoxication, stopped my father in the street and said to him, "Do you mind when I used to go to school to you?" "O, yes, quite well," was father's reply. He then said, "Do you mind about getting me over into them fractions?" Father said that he remembered that also.

Then the old man, staggering up against the fence, said: "Well, say, Doc! I'm right there in them damned fractions yet."

As an Eclectic I was in fractions; as a "Regular" I was in compound fractions, and as a surgeon, I guess I must be in logarithms.

THE PROPHYLAXIS OF TYPHOID FEVER.

By F. W. Hachtel, M.D., and H. W. Stoner, M.D., Baltimore, Md.

(Read before Eastern Panhandle Medical Association, July 3, 1912.)

In the prevention of typhoid fever sanitarians have so many factors to deal with and so many obstacles to overcome that the task of eradicating this disease from the country, or even from a community, seems almost impossible. This is due to the fact that the sources of infection from typhoid are many, and the difficulties in determining from just what source any particular epidemic or sporadic case may be derived are often hard to solve. Among the more common sources of infection may be mentioned: Infection through polluted drinking water; infection through contaminated milk; infection through raw oysters; infection through raw green vegetables; infection carried by flies; and infection by direct contact, either through patients with the disease or through typhoid carriers.

By far the larger number of cases of typhoid fever derive their infection through polluted water, and the number of epidemics as well as endemic cases traced to this source are too numerous to take up in this paper. Suffice is to say that of 650 epidemics of typhoid fever collected from the literature by Schuder, 462 or 71% were due to polluted water.

Perhaps milk can be considered as the next prolific agent in the dissemination of this disease, and of the 650 epidemics just mentioned, 110 or about 17% were traced to milk.

While the number of cases of enteric fever traceable to infection through raw oysters and raw green vegetable are far below the sources already mentioned, at the same time these edibles do very frequently transmit the disease, and numerous extensive epidemics have been traced to this origin.

Of recent years attention has been directed to the common house fly as an intermediate agent in the transmission of typhoid fever. It has been shown that these pests vary their menu by feeding on human and other dejecta in privies, stables and hog-pens with the food on the tables of their human hosts. They are born in the manure pit and often end their existence in the cream pitcher or molasses jar. A large number of cases of typhoid fever are directly due to flies carrying the typhoid bacillus, either directly from infected individuals to food, or from outhouses in which the stools of typhoid patients have been deposited without being properly disinfected. Dr. O. O. Howard, Chief of the U. S. Bureau of Entomology, is so convinced that the common house fly is responsible for a great number of cases of typhoid fever that he has renamed it the "Typhoid-fly."

One of the most dangerous sources of typhoid infection, the more dangerous because they are never discovered until many cases of the disease have developed, and very frequently are never discovered at all, is the typhoid carrier. A typhoid carrier is an individual who has usually had an attack of typhoid fever, and while apparently recovered, still have some local infection in the gall-bladder, urinary bladder, or other organ, in which the typhoid bacilli continue to live and multiply with little or no apparent distress to the individual so infected. These organisms are discharged through the intestinal or genito-urinary tracts and are the means of infecting not only those persons with whom the carrier is associated, but also water, milk and the food supplies. Ever since the discovery of "Typhoid Mary" by Soper in New York in 1907, sanitarians have been on the lookout for typhoid carriers. Typhoid Mary was a cook who infected 26 different people in eight different families in which she was employed. In Baltimore we have been able to trace five local outbreaks of typhoid fever to carriers. Bigelow has recently reported a carrier who was responsible for an epidemic of typhoid fever in Worcester, Mass., during 1910, in which 13 individuals were infected, and who was probably the

source of two smaller epidemics in 1909. Since the majority of cases of typhoid occur in individuals under 30 years of age, the average life of a carrier is about 25 years, and when we consider that about 2% of all recovered cases of typhoid fever are carriers, we have an appalling source of infection to look out for and guard against.

As stated above, in order to combat all these sources of infection the physician has before him a gigantic undertaking, and while sanitation, both general and personal, has received particular attention in recent years, and great strides are being made in the improvement of hygienic conditions, it will be many years before the ideal will be realized, and in the meantime, unless some more direct method of dealing with this disease is employed, many lives will be sacrificed to what has justly been termed "a preventable disease"; a preventable disease that is the direct cause of 35,000 deaths annually, with an economic loss to the country of $300,000,000.

VACCINATION AGAINST TYPHOID FEVER.

Experimental inoculations against typhoid fever were first made by Sir Almoth Wright and by Pfeiffer and Kolle, working independently, in 1896. The first practical vaccinations were made in 1899-1902 by Wright, who inoculated about 10,000 soldiers of the British army during the Boer war. His earlier methods were rather crude, and the results of many of the inoculations were lost sight of. However, it was found that both the morbidity and the mortality from typhoid fever was much lower in the inoculated soldiers than it was in those not inoculated, and Wright, in a careful attempt to present the subject fairly, estimates a reduction of the morbidity among the inoculated men as 50%, and a reduction in the mortality of those that became infected in spite of the inoculations as 50% also. These combined results would give an average reduction of about 75% in the total death rate.

In 1904 vaccination against typhoid fever was instituted in the German army, and in 1908, Major F. F. Russell of the United States Army started to vaccinate soldiers who voluntarily submitted to the inoculations. The results of Major Russell's experiments were so satisfactory that in 1910 it was made compulsory for all enlisted men to become vaccinated against typhoid fever, and the same rule has subsequently been adopted by the United States Navy.

The value of this prophylactic measure in preventing typhoid fever in the army has been made the subject of an article by Kean, who makes a comparison of the typhoid rate among the soldiers of the Second Division, Seventh Army Corps, encamped at Jacksonville, Florida, in 1898, and the encampment of the Maneuver Division at San Antonia, Texas, in 1911. The Jacksonville encampment is cited, not because the typhoid rate at this encampment was considered particularly high at the time, but because of the close similarity of the conditions. Both divisions were encamped in nearly the same latitude and for about the same length of time, each had a good camp site and an artesian well water supply of unimpeachable purity. None of the men of the Seventh Army Corps were inoculated. There were 10,759 men in the camp, and of this number, 2,693 had certain or probable typhoid fever with 248 deaths. At San Antonia 12,000 men were in camp, with two cases of typhoid fever and no deaths. All the enlisted men in this latter camp were inoculated, and one of the cases of typhoid fever occurred in a teamster who had not been inoculated, the other in a private in the hospital corps, who had received but two doses of the vaccine. The latter case was of the ambulatory type, and consisted only of malaise and a slight fever that persisted but a few days, and the case never would have been recognized as typhoid fever, were it not for the fact that blood cultures are made from all febrile cases occurring in the army, and the typhoid bacillus was isolated from this man's blood.

Typhoid vaccine consists of an emulsion of killed typhoid bacilli in normal salt solution. It is prepared by growing the organisms on agar for 24 hours, washing off the growth with saline solution, killing the bacteria by heating them at a temperature of 56° C. for an hour, and adding 0.5% phenol to prevent contaminations. Aerobic and anaerobic cultures are made to make sure all the organisms have been killed, and also to avoid any possibility of the vaccine

being contaminated with tetanus or other pathogenic bacteria. The toxicity of the vaccine is tested by inoculating guinea-pigs and mice from each stock of vaccine before it is distributed. The vaccine is standardized by taking an equal quantity of the bacillary emulsion and human blood, mixing the two thoroughly, making a thin smear on a slide and staining. Since we know that human blood contains 5,000,000 red blood corpuscles to the cubic centimeter, by counting both the bacteria and the blood cells in a number of microscopic fields, the relative number of bacteria to the blood corpuscles represent the number of bacteria in a cubic centimeter of the emulsion. The emulsion is then diluted with salt solution so that each cubic centimeter contains the number of organisms it is desired to administer at a dose.

The inoculations are made by drawing the vaccine into a sterile syringe and injecting it subcutaneously into the arm, which has previously been cleaned by washing with soap and water and rinsed off with alcohol, in the region of the insertion of the deltoid muscle. Three inoculations at from 7 to 10 days intervals are required for the complete immunization of an individual.

In the army doses of 500 million, 1,000 million and 1,000 million dead organisms are given at intervals of 10 days. In our work we are now giving 250 million, 500 million and 1,000 million doses, although formerly we gave but half these doses. We believe that this dosage is better suited to the general public, including as it does women and men in different stations and degree of life.

The injections are followed by local swelling and tenderness around the site of injection, which usually passes away in from 24 to 48 hours. Besides this, in a certain percentage of cases there is also some systemic reaction. This includes malaise, headache, chilly feelings, rise in temperature, rarely nausea and vomiting. These symptoms also usually subside in from 12 to 24 hours, and seldom follow but one of the inoculations.

We started our work of immunization in March, 1910, by inoculating ourselves and members of the laboratory force of the joint laboratory of Baltimore City and Maryland State Departments of Health. A little later, owing to the excessive typhoid rate among physicians, nurses and hospital attendants, we extended our work to this class of individuals. This year our work has been further extended by appropriations by the State Department of Health of Maryland and the Baltimore City Health Department for the preparation and distribution of this vaccine, and any citizen of the City of Baltimore or the State of Maryland can secure the vaccine free by making application for it through his family physician. Up to the present time we have inoculated about 2,800 individuals. These include 309 resident physicians, nurses, and attendants and inmates of state institutions; 434 physicians and nurses in private practice, medical students and private citizens of Maryland.

The severity of the reaction following the inoculations varies greatly. In nearly every case there is swelling, redness and tenderness around the site of inoculation, which usually disappear in from 12 to 24 hours. Since the systemic reactions that sometimes follow the inoculations are so variable in that they differ in nearly every case, we have classified our cases according to temperature. Of the total number of 2800 cases about 57% had no increase in temperature nor showed a systemic disturbance following the inoculations; about 38% had slight fever, ranging between normal and 101°; about 4% had a temperature between 101° and 103°; and 0.8% had a temperature of over 103°. As already mentioned, a rise in temperature is by no means the only symptom following the inoculations, but it may be accompanied by malaise, headache, muscular pains, nausea and vomiting, and sometimes chills. The durations of these symptoms may be only a few hours, or rarely they may persist for several days.

Although our experience with the vaccine has extended over a period of two years, and our cases consist largely of a class especially exposed to infection, none of the people we have vaccinated have had typhoid fever. Some of the more striking results we have noted may be worth mentioning. As stated before, 309 of the cases we inoculated were physicians and nurses in six Baltimore hospitals and none of these have become infected with typhoid.

Since the inoculations have been given, however, seven cases of typhoid fever have occurred in these same institutions among 82 nurses and attendants who were not immunized. At Springfield Hospital for the Insane there are about 1200 inmates, including physicians, nurses, etc. The attack rate from typhoid in this institution has averaged during the past five years about 1% or 12 cases per year. Early last year we immunized 887 in this hospital. During the year three cases of typhoid fever developed, and these three cases were among the 313 individuals not inoculated. This is a very striking example of the efficacy of typhoid vaccine. It shows that the source of typhoid infection at this institution still existed to about the same extent as during the five previous years, shown by the 1% attack rate among the 300 individuals not vaccinated, at the same time all those who had received the vaccine, while apparently undergoing the same exposure to infection as formerly, were protected.

Just how long the immunity lasts after typhoid vaccination has not been determined. Up until recently soldiers in the army were required to be revaccinated every three years, but a short time ago the time was extended, so that now they are revaccinated every four years. A considerable time must elapse before we are able to determine this point with any degree of accuracy. In civil life a study of this matter is practically impossible, and even in the army, from which we hope in time to secure our most reliable statistics, it will be a long time before sufficient figures will be available to arrive at any very definite conclusions, owing to many of the men quitting the service and being lost track of at the expiration of their enlistment.

210 Professional Building,
Baltimore, Md.

ACNE VULGARIS TREATED BY AUTOGENOUS VACCINES—ORVALL SMALLEY, M.D., of Indianapolis, in *J. A. M. A.*, reports 100 cases treated by autogenous vaccine. He concludes: "The results are so uniformly good that where one can control the patient, a cure of the condition can be promised in every case. The sequelae are greatly modified or entirely disappear; hence I believe that the acne bacillus or its toxins are responsible for the associated symptoms and conditions occurring in acne infections."

G. D. L.

CANCER A MOTILE GERM, AND THE MEANING OF THIS FACT TO THE CLINICIAN.

By G. Betton Massey, M.D.,
Philadelphia.

(Read at Annual Meeting State Medical Association, July, 1912.)

It is not my purpose in this brief paper to discuss the claims of certain research workers who think they have identified the germ of cancer and the denials of the correctness of these claims by others. The question is not in a condition for discussion by others than these special experimenters, and it is best for clinicians to stand aside until some agreement has been reached. I have, nevertheless, strong faith that conclusive facts will shortly make the etiology of the several varieties of cancer as clear as that of malaria and syphilis, both of which have been understood so short a time.

In the meantime no harm can result from an assumption on our part that the several forms of cancer and sarcoma are of parasitic nature, judging from certain clinical facts, and so directing our remedial efforts that we may anticipate in part the practical benefits flowing from the discovery when made. An opposite course—a failure to take the operative precautions dictated by the evidently parasitic and auto-inoculable nature of these growths, is, I believe, costing us a large number of operative failures that might have been successes.

The most important fact to be noted is that the whole clinical history of a malignant growth indicates that its living components are motile, omnivorous entities, the degree of motility and voracity bearing direct relations to the degree of virulence. Analyzing the facts more closely, it is evident that the degree of malignancy of a type of cancer, or of an individual growth, is but another term for the degree of the motility and voracity of the cancer-germ-infected-cell present in the growth. For what do pathologists regard as the essential condition present in a histologic section determing malignancy and by which a diagnosis of cancer is arrived at and its degree of virulence measured? This essential finding, without which no diagnosis of malignancy is made, is merely more or less

erosion of normal histologic elements and their replacement by migrated cell groups other than leukocytes. In other words, cancer is diagnosed at present, not by finding and recognizing so-called cancer cells, as was formerly claimed, but by the evidences of a migration and conflict between the cells of the new growth and the normal cells of the part. The normal cells, even of the hardest osseous tissues, are destroyed, and in their place are found the foreign cells in riotous abundance. This is the usual picture. In a few cases of so-called stone cancer the invading germs are being more or less overcome by the defenders of the body, and the growth may be exceedingly slow.

The pathologist's section, it should be remembered, gives us a view of the conditions present at the moment of death and fixation of the tissue. Sections at the edge of a malignant growth of much virulence doubtless show us a picture of a battle photographed at a single moment of the progress of the conflict. When the moving picture machine can be successfully applied to this subject we will know more of it.

The microscopic evidence on which the pathologist bases his diagnosis of malignancy is then our strongest proof that the essential agency of cancer is motile, for it is impossible to have erosion without motility of the eroding agent.

But I should not say that the microscopic evidence is the strongest, though doubtless it is the most convincing, for what is the appearance to the unaided eye of the average neglected cancer but one orgy of erosion, the growth devouring neighboring structures so clearly and distinctly that the facts are evident to the mere layman.

By some sort of mental inertia we have allowed the true significance of this erosion to escape us.

If the picture of an advanced carcinoma does not convince you that we have a moving, boring entity to deal with, consider certain facts of auto-inoculability. It is true that the inoculability of cancer from individual to individual, even of the same species, is difficult, though it has been frequently accomplished in the lower animals of late (the difficulty being doubtless explained by the fact that the experimenters have been trained mainly in the handling of vegetable organisms while the cancer organisms are most likely protozoal), but when the question is one of auto-inoculability, the ease with which this occurs in a susceptible individual is evident in nearly every case. I have seen many secondary growths in an epithelioma of the face, implanted by the finger nails of a careless patient. There is evidence that a carcinoma has been transferred on the knife of an operator from such a growth in the ovary to the clean cut in the abdominal wall, as noted by Cullen and others. There are numerous evidences of auto-inoculation in the local recurrences so common after imperfectly performed knife operations.

The phenomena of metastasis, leading to secondary growths in the individual, are in reality evidences of spontaneous auto-inoculation. The mode of formation of these so-called metastases, which should rather be called colonies, is well known to be by the protrusion of a graft, or of a single infected cell, into the lumen of a vein or lymph vessel, which is later broken loose from its attachment and floated onwards through the vascular system until mechanically arrested, where it proliferates as a daughter tumor.

Precautions Dictated by Cell Motility in Cancer.

A realization of the phenomena of automobility of the living thing in a cancer, which gives distinctive characteristics to these growths, should lead us to the following practical conclusions:

1. We should be more optimistic in our views of early treatment, and no longer encourage that vicious circle ever leading to worse results that flows from a policy of early inaction and late operations. Who would think of waiting for a whole city to be infected with smallpox to prove that the infected immigrant in that city had smallpox? Yet we still hear of physicians who advise delay in operations when an early, scientific eradication of the local disease would save the rest of the body from invasion.

2. The fact that we are dealing with an evidently parasitic, motile germ should render our choice of the method of eradication more scientific. Any curetting or other disturbance of the living germs should be absolutely barred and incomplete operations with the knife should be equally avoided.

A wide-sweeping excision with the knife, without wounding the growth or permitting its living cells to come in contact with the freshly cut edges of the wound, should be the only knife operations done. Should this be impossible in the particular case, we should employ a method which kills the affected cells and germs, if present, *in situ*, such as the destructive sterilization by the electric diffusion of the ions of zinc and mercury that I have advocated. The X-ray also acts at times in this capacity, being most effective in certain widely spread skin growths of slight depth; but this slow method should not be employed in cases in which either of the previously mentioned methods can be made effective.

3. It is clearly evident that the prevalent, subconscious view of many surgeons that cancer is incurable, and possibly even constitutional, is due to the result of unscientific operations on a parasitic, motile organism that is readily reimplanted in a susceptible host by unscientific technic in its attempted removal.

The Massey Sanitarium, 1823 Wallace street, Philadelphia.

PYORRHEA ALVEOLARIS

By C. H. Chapman, D.D.S., Webster Springs, W. Va.

(*Read at Annual Meeting State Medical Association, July 11, 1912.*)

The object of this paper is wholly for the benefit of this association, and we hope it will not be turned into general publication. As this is to be a short paper, I cannot discuss this subject fully nor as accurately as it should be done, and leaving off apologies, excuses and preliminaries which are so common in papers of this kind, I take up the subject of pyorrhea, to view it briefly from the angle which will interest you physicians most.

Pyorrhea is a disease of the gums and alveolar process beginning with a chronic inflammation at the gingiva, at which time it may be known as gingivitis or the first stage of pyorrhea. This inflammation increases with the deposit of calculus under the free margin of the gums and on the necks of the teeth, terminating in infection, in which we have a clear and in some cases slimy secretion from the gums and a free flow of pus from the pockets formed at the junction of the root of the tooth with the alveoli. This pus formation continues to burrow, consuming the margin of the process until the bony structure has disintegrated, leaving the tooth standing without support, just as a stake would stand (or rather would not stand) when the sand and earth has been washed away from about it.

It is an insidious disease, there being only slight swelling and no pain until the disease is far advanced, when the teeth get sore or have occasional acute abscesses. The disease comes on gradually, and in the absence of pain the patients usually never know there is anything wrong, even in advanced stages, when they will probably remark that their "teeth bleed so easily." If untreated this disease always results in the loss of the dental organs and alveolar process, and thus make it difficult for the patient to wear a plate. It is a startling fact that more teeth are lost from this disease than from all other causes combined. Many teeth have become hopelessly affected before the patient becomes aware of the condition. Let me make it clear here that I am not discussing the decay of the teeth.

As you practitioners all know, a well developed case of pyorrhea is one of the most filthy conditions you ever meet with. Yet those who have it do not seem to realize this fact. Ladies and gentlemen who are scrupulously clean in their habits and apparel seem to tolerate this most filthy and unsanitary condition in the mouth, seemingly ignorant of the true condition or danger. It has been estimated that a patient in an advanced stage of pyorrhea swallows two drachms of pus a day. It usually requires but slight pressure on the gums to cause the pus to flow out on the teeth. This being true, the pus then would be thrown out while the patient is eating and be swallowed with the food.

Causes.

We are able to differentiate three classes of pyorrhea, and we pity the practitioner who sees but one kind and thinks of but one cause.

Of course oral filthiness and an unsanitary condition is the total cause of one form, and this form predominates.

Another cause is the result of filth in

combination with constitutional disturbances. This class is usually, in company with mal-occlusion, brought about by injudicious extraction of young folks' teeth, which is so common in this Little Mountain State, and from this very fact let me say, gentlemen, that we practitioners of medicine and dentistry often do irreparable damage to our boys and girls by extracting teeth that by all means ought to be filled.

The third class are patients who make an effort to maintain oral cleanliness, and the crowns of the teeth are unusually bright and clean, with pus exuding from pockets about the teeth and the characteristic slimy, offensive secretions coming from the gums.

Most of these patients have a systemic disturbance characterized by incomplete metabolism of nitrogenous food-stuffs and the stored proteids in the body. In many dyscrasic states, especially the so-called gouty, rheumatic or uric acid diathesis, the deficient oxidation of nitrogenous substances gives rise to reduced alkalinity of the blood and saliva, inadequate activity of the excretory channels and formation of uratic concretions in or about the articulations. The concretions are from the serum of the blood and known as serumal calculi. The same crystals of sodium biurate which accumulate in the joints in articular rheumatism are found in the peridental membrane. That is the joint of the tooth. Now, when these uratic concretions form about the alveoli they act as foreign bodies, and as such set up inflammation, which, when advanced to the suppurative stage, becomes pyorrhea alveolaris.

Now the question arises, what causes this systemic disturbance with incomplete metabolism of nitrogenous foodstuffs and the stored proteids? I would think him a narrow practitioner who thinks of but one cause and attempts to treat all cases alike. We have treated cases in which the symptoms disappeared as if touched by magic and the same treatment in other cases was only palliative. Each case of pyorrhea should be diagnosed and treated from an etiological standpoint. Here is where the dentist needs the aid of a physician. But few dental practitioners in this locality are capable of treating these conditions.

During the winter months, when the excretion of acids through the skin descends to the minimum, the blood becomes of its relative low degree of alkalinity, or uric-solvent power, fails to hold uric acid in solution, and consequently attacks of gout, rheumatism and pyorrhea are of more common occurrence in this season of the year. Any agent which hinders the elimination of uric acid and diminishes the alkalinity of the blood is an exciting factor in producing pyorrhea.

We have pyorrhea sometimes coming from mercurial poisoning or excessive use of that drug. Also from lead poisoning, which is said to be incurable.

A form of pyorrhea is met with in a class of persons who lead sedentary lives. Peristalsis of the intestines seems to be paralyzed, with a retention of feces resulting in autointoxication, which weakens the heart muscles, reducing circulation, thus impairing nutrition. You will often find pyorrhea in patients who have pulmonary tuberculosis, syphilis, Bright's disease, or in drinkers and smokers, or where any cause exists that would reduce the general vitality.

Now let us view this from the angle that you physicians would be most interested in. Let us change this around and see what pyorrhea causes instead of what causes it.

There is a lack of definite information regarding conditions pertaining to the teeth, mouth and their relation to the general health. You know Horace Fletcher not long since pointed out to physician and dentist alike that digestion commences in the mouth and progresses in proportion to the thorough mastication of food. Food cannot be thoroughly masticated when the patient has missing or sore teeth. If the food is not properly chewed digestion is not perfect. If digestion is not perfect assimilation cannot be perfect. If assimilation is not perfect the person is not in good health. Even the public at large is awakening to the fact that there is a close relationship between a clean mouth and a healthy body.

Edmund Hunt, M. D., D. D. S., says: "More bodily ills are due to what we eat, how much we eat and how we eat it than to any other cause.

"All the long train of diseases from plain 'stomachache' to appendicitis, all diseases of faulty cell life in the body, such as cancer, rheumatism, gout, pyorrhea and a host of other diseases; in fact, the great major-

ity of all human diseases, may be traced to the same fundamental starting point—what you eat, how much of it you eat and how you eat it."

Oral Hygiene says: "Diseased teeth and unclean mouth are the most frequent causes of indigestion. Chew your food well; the stomach has no teeth."

Major W. O. Owens, M.D., surgeon U. S. Army, says: "Proper care of the mouth and teeth is one of the most important of all the measures that are taken for the protection of the human body, and the failure to give these care is, in my judgment, the direct cause of more disease in the human family than any other single cause."

Osler, in an address to dental students, said: "Gentlemen, you have just one gospel to preach. You have got to preach it early and late, in season and out of season. It is the gospel of cleanliness of the mouth, of the teeth, of the throat. These three things must be your text through life. There is not a single thing in the whole range of hygiene more important than that, and it is with that you practitioners will have to deal."

Also he said again: "There is not any one single thing more important in the whole range of hygiene than the hygiene of the mouth. If I were asked to say whether more physical deterioration was produced by alcohol or by defective teeth, I would unhesitatingly say defective teeth."

H. Konninger, in *Journal of Hygiene*, says: "An unclean mouth is a standing menace, not only to the individual himself, but also to those in his environment. Such a mouth is a hot bed for the development of germs alike baneful to the possessor and transmissible by breath to others."

We could quote at this rate all day, but now if you will just stop for a moment and reason on the clinical aspect of a well developed case of pyorrhea it will be unnecessary to make quotations. With these deep pockets about the teeth filled with pus, food debris and filth, doesn't it seem natural that we would have a portal of entry for systemic disease, such as rheumatism and endocarditis? Are you surprised to find inflamed tonsils and pharynx? If acute articular rheumatism with its associated diseases is an infection, as I suppose you physicians all agree, where is the infection atrium?

Dr. Gordon Wilson of the University of Maryland thinks this disease is a pyaemia and originates from a suppurating point. Dr. Wilson agrees that in some cases the portal of entry may be the tonsil when inflamed, but he declares as his experience that the source of infection can be found most often in the teeth, and purulent discharges therefrom are responsible for more of the severer types of rheumatism than we have any idea of. However, it is undebatable that the daily absorption of pus, whether from pyorrhea or other pus conditions, has caused acute septic endocarditis, dyspepsia and neurestheniа, and in conjunction with this we point out the fact that the absorption by the open blood vessels in the gums may produce a slow toxic poisoning of the entire system. This condition being often associated with pyorrhea, leads many to think that the abnormal systemic condition produces the pyorrhea, reversing the cause and effect.

While we believe that the tonsils are often portals of entry, yet compare them to the conditions of the pus-laden and bleeding gums. Personally I have never seen a case of pyorrhea where the patient did not give a history of rheumatism or gout.

Pyorrhea is undoubtedly an exciting cause of chronic suppuration of the frontal and ethmoidal sinuses and antrum.

Gentlemen, just try the experiment of examining the gums and oral conditions of your patients who have rheumatism with its various forms and complications. Have you ever thought that the enlargement of the glands of the neck, of the nose, of the tonsils and pharynx might be due to absorption through infection atria of the teeth and alveoli?

Every twenty-four hours if normal more than two and one-half pounds of saliva are secreted. This goes to the stomach contaminated with this clear, slimy, poisonous secretion from the gums, and with this two drachms of pus in a typical case of pyorrhea. This is repeated day after day—yes, month after month, the patient never getting away from this for one minute. As you see the condition in this light are you surprised that your patient has impaired digestion from faulty mastication, septic poisoning from the continued swallowing of this secretion and pus? These poisons be-

ing constantly mixed and swallowed with the food may cause serious digestive disturbances. Do you not see that this constant swallowing of pus and secretions, as well as the putrefying foods about these teeth, is a real danger to intestinal troubles? Might it not set up fermentation and putrefaction? We depend upon the hydrochloric acid of the stomach to disinfect these septic products, but we recall that sometimes conditions are so changed in the stomach as to neutralize this acid or stop its production. This would give the septic material a chance to become active.

Doctors, let me offer this suggestion. Try examining the gums and teeth of your old chronic complainers of stomach disorders. I venture to say that almost invariably you will find the patient has few or no teeth or has a filthy oral condition or is a bolter. I suggest that the average physician too often sees only the dorsum of the tongue and forgets to see the other conditions of the oral cavity.

E. B. Bush, M. D., of Chicago, says: "Many cases of general asthenia, malnutrition and anaemia under medical treatment are primarily due to oral causes; and not all the tonics in the pharmacopeia will suffice to cure the patient who cannot chew his food, or who is constantly swallowing bacteria and their products from conditions of oral sepsis, such as dental caries and pyorrhea." He says: "In daily practice these unfortunate patients are a trial to their physician, who seldom accomplishes much toward permanently relieving their state of health until he examines the source and not the sequel of the symptoms and insists upon proper treatment of the mouth and teeth." He further says: "To the disgust of the patient and physician alike who often part company at this stage with a feeling of mutual relief the busy physician dismisses the matter from his mind with the thought that 'there is no satisfaction in treating the chronic cases that are all run down,'" and later he says: "These patients may develop chronic nervous and mental disturbances, neuralgia, insomnia and the various fatigue neuroses, leading in neglected cases to a complete breakdown."

Dr. E. C. Rosenau, a bacteriologist of Chicago, says he traced six deaths to bacteria found in the oral cavity, three to pyorrhea and three to chronic fistulous abscesses. Dr. Black of the same city said: "I wonder how many people we are killing by neglecting to treat and cure these two diseases?"

Treatment.—The treatment in the second and third classes of cases I have mentioned is local and systemic. The local treatment will not be interesting to you, as that is for the dentist, and I shall not lay down a systemic treatment for you to follow, as it is the object of this paper to enlist your assistance, for dental practitioners feel their inability to cope with the systemic features. However, I might offer the suggestion, which no doubt you all would follow, to treat the patient for the cause of whatever disease is lowering his vitality. First have the dentist to remove all the deposits and correct malocclusion occurring from injudicious extraction of teeth. Of course in those with the rheumatic diathesis you would stimulate the excretory system, promote elimination of wastes and assist the digestive apparatus. The alkalinity of the blood should be raised. It might be well to keep the bowels open with sulphate of magnesium. Put the patient to drinking water.

Dr. Burgard of Louisville thinks the most efficacious constitutional treatment would be the administration of autogenous vaccine where tissues are chronic and ooze pus. This would raise the opsonic index and stimulate the phagocytes.

I believe the physicians who have co-operated with me have generally used such drugs as lacto phosphate of sodium and calcium, magnesium sulphate, lithium, citrate of magnesium, etc., with directions for dieting, bathing and exercise. However, there can be no exact treatment laid down, and it will depend upon you to prescribe as you see fit.

SEPTIC SORE THROAT.

By W. S. Link, M.D., Parkersburg, W. Va.

(*Read at annual meeting of State Medical Association, July, 1912.*)

The distinctive and widespread epidemics of sore throat which have occurred in Baltimore, Boston and Chicago during the past winter and spring have excited so much in-

terest and caused so much investigation that I feel a consideration of this subject will be appropriate at this time.

Barring complications these infections have all pursued a similar course. The cases were ushered in by the symptoms common to any severe infection, namely, chill, fever, gastro-intestinal disturbances and prostration, the latter being out of all proportion to the local involvement, which was seen in a dusky redness and swelling of the throat, often with a membrane resembling diphtheria, and enlargement of the cervical glands. A feature which impressed me particularly and naturally was that the tonsils were found to be involved in every instance, usually as a follicular tonsilitis, with an exudate and nearly always with a membrane. In two or three days these symptoms all subsided and convalescence and resolution seemed to be taking place, when suddenly there was a recurrence, with all symptoms aggravated. The throat swelled so as to render swallowing difficult and painful; the glands were enormously enlarged and often broke down and ulcerated or suppurated; the prostration was extreme; fever often reached 105° and 106° and was strangely persistent despite antipyretic measures. The disease then ran a course of one to three weeks, during which period many complications occurred, namely, oedema of the face, otitis media, abscesses, peritonitis, erysipelas, arthritis, empyema, brain abscess, meningitis, etc. Death occurred frequently during the secondary period.

The specific cause of this disease is a streptococcus, which occupies a position, bacteriologically, between the streptoeoccus pyogenes and streptococcus mucosus. It has been proven to be of exceptional and extreme virulence. Exhaustive clinical tests have shown the source of this organism to be in the milk.

The treatment of these cases has obviously been symptomatic and palliative.

While these epidemics have produced a distinctive type of septic sore throat, with a specific organism as a causative factor, still it would seem highly probable that all severe acute septic inflammations of the mouth, tongue, fauces, pharynx, larynx and neck would present the same, or a markedly similar, clinical picture, and might all be classified as acute septic inflammation, and whatsoever name may be applied to any particular inflammation would only be a specification of the part which is first attacked, and this local focus of infection would be quite accidental and the character of the disease should depend solely upon the quantity and virulence of the micro-organism. It has been proven that any one of these pyogenic cocci—the streptococcus, staphylococcus, pneumococcus, etc.—is capable of causing all forms of these inflammations.

Therefore, addressing you more particularly as general practitioners, I desire, as I stated above, to call your attention to the fact that the majority of these cases of septic sore throat have their initial focus somewhere within the tonsillar ring—that is, the ring formed by the faucial, pharyngeal and lingual tonsils and their connecting lymphatic vessels. And I wish further to bring to your thoughtful consideration the paramount importance of recognizing and accepting the fact that the tonsils are a most frequent and likely portal for a general, systemic, infectious invasion.

The anatomical position and structure of the tonsils—situated within the buccal cavity, with its many crypts opening freely upon the mucous membrane—constantly opening and closing, render it readily accessible to contamination by poisonous products of the air and food; the tonsillar lymphatics are numerous and have very free anastomosis; they connect with the deep cervical glands and thence with the jugular; they are also intimately connected with those of the nose and tongue. Therefore, being in the direct tracks of respiration and alimentation, constantly exposed and accessible, always undergoing change, with plentiful blood supply and free lymphatic connection, with thin covering and many crypts, the tonsil must surely be very prone to infectious invasion.

These facts should certainly place tonsilar infection as a factor in systemic disease. The inter-association of tonsillitis, rheumatism and chorea has been an accepted relation for many years; likewise similar local affections of the throat and neck, but the general medical mind has been astonishingly tardy and skeptical as to the probability of grave affections—more remote—being caused by tonsillitis. However, clinical and

experimental evidence shows that the tonsils are the ports of entry for infectious material in a wide range of diseases, among which are pericarditis and endocarditis, arthritis, adenitis, nephritis, appendicitis, neuritis, phlebitis, osteomyelitis, pleurisy, septicaemia, pneumonia. There is no doubt that diphtheria and scarlet fever are almost invariably traceable to infection from the tonsils, likewise otitis media and therefrom meningitis and brain abscess. For many years exhaustive work—clinical, pathological and bacteriological—has been done in an endeavor to ascertain the true function of the tonsils, and while there has been a wide divergence of opinion, the concensus would seem to regard it as one of defense against infection, limiting this power, however, to the first six to eight years of life, after which the tonsils become pathogenic; and I would call your attention to the fact that in the epidemics previously discussed the infection of septic sore throat was found almost exclusively in the adult.

Upon scanning the program for today I could not help but selfishly feel that "brevity would be the soul of wit" in my case, considering the talent with which I was associated, and that I should profit more by reception than by propulsion. I have purposely made my paper short, but before closing I feel that it may be pardonable to set forth certain views of mine as to the removal of the tonsils, and primarily I wish to state that indiscriminate removal of the tonils is nothing more than reprehensible. Conservatism is as important a factor here as in the realm of the abdominal surgeon. Strange as it may seem, an absolutely normal tonsil can scarcely be diagnosed, but we can always be assured that if there are conditions and symptoms which would be attributed to tonsillar infection the tonsils should be removed. Superficial involvement is rarely the real diseased portion (excepting an hypertrophy which interferes with respiration and swallowing), but it is in the crypts that we must look for the real trouble, as they extend to the base of the gland, and it is the submerged portion of the gland —that way down between the pillars—which should be the cause of most alarm and receive the most thorough removal. In these cases adhesions are always present and usually dense, especially to the pillars in front and behind; tonsillotomy merely aggravates—a thorough tonsillectomy is the only rational course—meaning by this a careful dissection of the tonsillar capsule from its faucial adhesion and a removal in its entirety.

In closing I would say that any involvement of the glands or contiguous structures, such as quinsy, otitis media, adenitis, etc., should be met by tonsillectomy—a complete removal; cases presenting gastro-intestinal symptoms in predominance should be referred to the family physician with a recommendation as to inspection of the tonsils, and in the many other diseased conditions previously mentioned, as results of probable primary tonsillar infection—a careful examination should be made, and if not positively contra-indicated the tonsils should be removed.

Selections

MEDICAL TREATMENT OF GRAVES DISEASE.

By S. P. Beebe, M.D., New York City.

For the purpose of this paper I will describe the general hygienic measures, such as rest, diet, climate and throat conditions, as well as the specific means which may be employed to control the over activity of the gland. First, the early typical cases: about 75 per cent. of these patients are young women between the ages of 18 and 30—but the disease may occur at all ages—I have had patients as young as six years and as old as 82. In a large proportion of cases the disease has followed a period of overwork, mental or physical, grief, anxiety or unusual responsibility, a severe emotional disturbance or depleting infectious disease There are, however, instances in which no such origin can be traced, but this forms only a small percentage of the total. Because of this fact there is, in the hygienic treatment of the disease, no one feature which is of so much importance by any method whatsoever as that of rest; and rest does not consist simply of putting the patient to bed. Very frequently physicians believe that by ordering a patient to lie down for an hour in the morning, two hours in the afternoon and leading a quiet life that they are securing the necessary rest for their patient. Rest must be physical, men-

tal and emotional, in just so great a degree as it is possible to control these factors. If the disease is well marked it is well to have the patient spend a large part of the 24 hours lying down. In the really severe conditions patients must be in bed for a considerable period and treated with respect to their activity as though they had typhoid fever. Very frequently the rest necessary cannot be obtained in a patient's home, as there the various members of the family may prove to be a source of great disturbance. No mental work can be permitted, or business affairs directed from the patient's bed. In the beginning few or no visitors should be permitted because of the excessive stimulation in which these patients are living. Very often they rebel at these provisions and declare it to be utterly impossible for them to stay in bed, and make all sorts of excuses for added activity. It may be necessary in the beginning to use a sedative to control the unusual excitement and excessive stimulation under which they live. It is useless to attempt to treat medically or surgically a patient with active Graves disease who is unwilling to give the necessary amount of time for the rest required. Because they are physically able to be up and about and feel fairly well they are unable and often unwilling to appreciate the serious nature of their disorder. The rest must be as complete as possible and considerable time must be spent in determining what are the specific disturbing factors under which they live. Their personal history must be known, the sources of worry and emotional disturbances and, as far as possible, their fears removed and the whole environment of the patient restored to just as complete a degree of tranquility as the circumstances will permit. Therefore, to simply put a patient in bed answers only a portion of the demand needed for rest.

Diet—Diet plays some role in the disease. Experiments on animals have shown that the thyroid is stimulated to unusual activity by the excessive use of meat; therefore it has been my custom to order a diet of simple food without meat or meat soups, and with no tea, coffee or alcohol. In the term meat is included all forms of flesh food; fish, clams, oysters, lobster, chicken and game are all prohibited during the first months of the treatment. I do not absolutely cut off all meat through the whole course of treatment in the majority of cases. A small portion of chicken, oysters or chop may be permitted every second day, but I have too frequently found that when general directions for the prohibition of meat are given patients use all forms of meat except beefsteak and pork. The patient should have an abundance of food. The appetite is often abnormal, and although a very large amount may be eaten the patient may lose weight; and in some instances it is not possible to feed a sufficient amount of any kind of food to prevent loss in weight, although the patient's digestive processes may be normal.

Climate—These patients are better during the cold months of the year, and each wave of excessive heat during the summer accompanied by a high degree of humidity is sure to be followed by an increase in the severity of the disease; therefore, when it is possible the patient should be moved to a climate that is cool and dry with an altitude of 1,000 to 1,500 feet. If this is not feasible, a comfortable room with excellent ventilation, equipped with an electric fan and other means for obtaining comfortable conditions should be found for these patients than hot, stuffy rooms crowded with other people, such as we frequently find in the big wards of the city hospitals.

Throat Conditions—It has been a common observation that a very considerable portion of these patients have enlarged tonsils and adenoids, and an acute attack of hyperthyroidism may follow promptly an acute attack of tonsillitis. These patients often give a history of repeated attacks of acute tonsillitis preceding the development of a goitre, with all the characteristic symptoms of the disease. Care must be taken to prevent these interferences or to quit them as much as possible. When the patient can stand the operation it is advisable to have a complete thyroid enucleation. Such an operation may be quite as valuable to the patient as a ligation of the superior thyroid arteries. The physician should use every care to correct a chronic throat infection and to prevent any acute development of the same.

One of the most popular remedies has been the serum of animals thyroidectomized, first suggested by Moebius. The thyroid

glands are removed from the animals and they are allowed to live from six to ten weeks after the operation before the blood is drawn. This serum is prepared for use either by hypodermic injection or the dried serum is made into tablets or capsules and given by mouth. The idea back of this method of treatment is the belief that certain toxic substances which are ordinarily destroyed by the thyroid activity, or which appear because the activity of certain glands is no longer inhibited by the thyroid, accumulate to great excess in the serum of the operated animal, and these substances are very valuable to combat the excessive activity of the thyroid patient. The literature of recent years, particularly in Germany, has many reports of valuable results from this serum. My own experience with this method is limited; but I have had some patients who have been decidedly benefited while using it.

The second method advocated originally by Forchheimer is the use of the neutral hydrobromate of quinine in five-grain doses three times a day. If the quinine alone does not control the condition, Dr. Forchheimer advocates the addition of one grain of ergot to each five grains of quinine. It is necessary to continue the administration of this drug for a considerable period of time. I have tried this method on more than fifty patients during the last two years. From this experience the conclusion is forced that in the acute cases it is of little value. In the mild chronic cases it often gives distinct relief; and, I am glad to say, that in three patients who had no visible enlarged thyroid, and in whom no enlargement could be made out by examination, it was the only treatment which would control symptoms. Two of these patients had been operated upon, one of them having ligation of the superior thyroid arteries; the second had had as much of the gland removed as a competent surgeon deemed it safe to take out, and they had continued to suffer from tachycardia, weakness, exophthalmos and tremor, in fact all the cardinal symptoms of the disease except goitre. No method of medical treatment afforded any relief until the hydrobromate of quinine was used. This remedy proved effective in these three cases to an unusual degree. It has been my custom during the last ten years to give this remedy during the latter stages of serum treatment when the symptoms have in a large part been controlled, when the serum treatment is gradually being discontinued and the patient is resuming normal activity of life, and my experience leads me to believe that the remedy has been a useful agent in helping the patient through this period.

X-Ray—X-Ray has been advocated as a valuable means of controlling the activity of the thyroid gland. My own experience leads me to believe that there must be quite different methods of applying this by its different advocates, for the reason that I have seen many patients in whom the disease has been aggravated by the X-ray exposure; in others in whom it appeared to be a benefit. Personally, I hesitate to recommend its use except in those cases in which there is no evidence that an enlarged thymus gland plays an important role in the disease. Autopsy reports, which, it must be remembered, are based upon the findings of fatal cases only, show that in a large percentage of cases the thymus gland is enlarged and active. Whether or not this is a primary condition or whether it is a secondary result to the hyperthyroidism, as Hansemann believes, is of course undecided. I have advised the use of the X-ray in a number of those patients in whom there was reason to believe the enlargement of the thymus gland played an important part in the disorder. In these cases, however, it is in the thymus and not in the thyroid which has been exposed to the ray. Experiments on animals show that a very high degree of atrophy of the thymus is readily produced by the X-ray, and the results obtained in these cases lead to the conclusion that the action of the X-ray is beneficial for them. If it had not been my experience to have many patients in whom the X-ray had produced increased activity of the thyroid it would be possible to speak of this method with more enthusiasm.

During the last six years the writer has been using, in the treatment of hyperthyroidism, a serum developed by inoculating rabbits and sheep with the proteids obtained from human thyroid glands. The reason for using a serum made in this way for this purpose should not be difficult to under-

stand. The symptoms of hyperthyroidism in the human subject are caused, in a large percentage of cases, primarily by the overabundant secretion of the thyroid gland. Certain well authenticated observations point almost incontrovertibly to such a conclusion. These observations may be summarized as follows:

1. The gland is enlarged. It has much increased blood supply, and histologically shows marked evidence of an increase in the total amount of secreting epithelium.

2. The symptoms of the disease, such as loss in weight, increased heart action, weakness, increased oxygen absorption, etc., can be imitated by giving to normal individuals large amounts of thyroid preparations.

3. Removal of the gland or a diminution of its blood supply by surgical means relieves the condition, while many observations show that these patients are in most cases more than usually sensitive to thyroid administration.

The gland, therefore, is over active. The function of the gland is not subserved within itself. The secretion prepared in the gland must reach distant organs and tissues. If the gland is over active and an additional amount of the active secretion, *which is chemically an iodized proteid,* reaches, through the medium of the blood supply, the tissues, which it stimulates to unusual activity, we have the complex of symptoms which we recognize in Graves disease. The blood in Graves disease, therefore, must contain an unusually large quantity of the active secretion prepared in the thyroid gland. When this secretion is present in the blood within normal limits, the physiological activity alone is served. When, on the other hand, excessive quantities are present, pathological conditions are produced.

The purpose of the serum treatment is to prepare in an alien species of animals a serum having specific antagonistic properties to the thyroid secretion. The injection of the serum into a patient having Graves disease provides him with a ready made antagonist to a complex toxic substance circulating in his blood.

Briefly, the serum is prepared by inoculating either rabbits (preferably Belgian hares) or sheep with nucleoproteid and globulin prepared from human glands. The inoculation must continue over a period of five to seven weeks, at intervals of about six or seven days, before the animal is sufficiently immune to make its serum have decided therapeutic value. At the end of this time the animals are bled and this serum prepared for inoculation in the usual way. After the first bleeding the animal may be inoculated again two or three times and a second bleeding made, but it has been found inadvisable to repeat this process more than three or four times, since the quality of the serum depreciates after this experience.

During the last six years more than 2,000 cases have been treated with serum prepared in this fashion. These patients have represented all ages and stages of the disease, the younger patients not being more than five years old and the oldest over eighty.

Graves disease, or, better, hyperthroidism, is in itself an extremely complex condition. The patients have represented all the different stages of the disease, and a vast deal of space might be used classifying the various clinical and pathological conditions which have been found. The experience obtained in the treatment of this number of patients has made it possible to differentiate between the different types of the disorder in respect to their suitability for serum treatment, but for the purpose of this paper it will be sufficient to class them into three groups:

1. Patients that have had the disease for only a short time, from two weeks to six months, in many instances in mild form, while in others very severe and acute.* All the classical symptoms of the disease may be apparent or one or two of them may be lacking. An enlarged gland with some cardiac disturbance is always present.

2. In this group may be placed those patients who have had the disease for a considerably longer time. The disease has been running a more or less marked course, with occasional exacerbations, with varying degrees of severity. It is intended to include in this group the fairly typical examples of the disease that have existed for some time, from four to eight years.

3. In this third group may be placed the so-called atypical cases, which oftentimes show very curious mixtures of Graves dis-

ease and myxedema, and in this group may also be included the patients that have had a history of Graves disease over a very long period of years, and who rarely, if ever, at the time they are seen, present the typical conditions found in the early development of the disease.

The best results in treatment are obtained with patients belonging in the first group. This is true also of the surgical treatment of the disease. No one point in therapeutics is so important as an early diagnosis. If the symptoms are very mild and have appeared within a few weeks, it may be necessary to use the serum for only a short time, perhaps not more than eight or ten injections, extending over a period of two or three weeks. On the other hand, if the conditions show very severe, acute development of the disease, active treatment may be needed for a period of four to six months. The percentage of recovery and marked improvement are much better in this first group than in the two following groups. Eighty per cent. of the patients in this first group will be very much improved or cured by serum treatment.

Because serum is used as a therapeutic agent in the treatment of this disease, there should be no relaxation in the other common sense medical measures to be employed. No sane physician would permit a patient having a cardiac disturbance and the general physical debility often seen in Graves disease to be active physically. However, because such patients have no pain, and because, until they reach the point of physical exhaustion they often feel very well, an amount of physical activity is allowed them, which is quite unwise and unwarranted.

In the second group are patients who have had the disease for a considerably longer time, and who have reached a point of being physically much more disturbed than those in the first group. The prognosis is not as good. Treatment must be continued over a longer period of time, and the final results are not as favorable. The patient is more likely to be left free from cardiac, nutritional, and nervous disturbance but with a marked exophthalmos, or thyroid gland which has not returned to its normal size. The recovery is slower, the period of enforced rest required is longer, the heart is not as quick to regain its tone, and the reaction toward serum treatment or any other form of treatment is slower and less decided. Fifty percent of the patients in this group may be cured or improved to a point where they can follow the usual activities of life without discomfort.

In the third group are found patients who are most difficult to treat. Here it is that the serum treatment has its smallest application. In this group are the patients who have the marked and complex conditions so hard to reconcile with our theories of the disease. Some of the patients show symptoms of Graves disease and others of myxedema. There is evidence that other of the ductless glands besides the thyroid have been involved, and the direct treatment aimed at suppressing the thyroid activity, either by means of serum or by operation, is not always followed by success. Serum may not only do no good to these patients, but it may do harm, and it requires a very careful analysis of each particular case to determine whether or not the conditions that are found are probably caused by an excessive function of the thyroid rather than a diminished function or a disordered function before one can intelligently conclude to use the serum. It is useless to quote statistics upon the results obtained with serum treatment in this group of cases, because it so rarely happens that serum alone can be relied upon as the effective agent.

The serum is administered by hypodermic injection. The writer usually gives it in the upper arm, midway between the shoulder and elbow, on the outer side. The needle should be pushed completely through the skin and the serum injected into the subcutaneous tissues. The dose varies. The first dose may need to be smaller than those given later on. It is generally wise to begin with an injection of not more than 8 to 10 minims, and follow this in twenty-four hours, if the reaction has not been disturbing, with a second injection somewhat larger; and injections may be continued daily for the first three to five days, gradually increasing the size of the injection until a full tube, 15 to 16 minims, is given at each injection. These are general directions to apply to the average case.

With a patient very acutely ill it may be necessary to give, during the first twenty-four hours, two or three full tubes of the serum. Following the inoculation there is likely to be an area of reaction develop at the site of the injection. This in most instances is no more than an area of redness and induration from 1 to 3 inches in diameter. This condition persists for a few hours and then subsides, so that twenty-four hours later the arm is practically in a normal condition. It occasionally happens that a patient is extremely sensitive to the serum and shows a very marked area of local reaction. The whole arm from the shoulder to the elbow and down on to the forearm may be swollen, tense, red, painful, and have something of the appearance of an erysipelas. With a patient so sensitive as this it is necessary to proceed carefully. It does not mean that the patient cannot take the serum, but it is very unwise to inoculate a second time until the reaction of the first injection has entirely subsided. If too early an injection is made, the second reaction will be very much more active than the first one, and the first area of reaction will again develop a condition very similar to what it had at first. If the injections are repeated too soon, the reaction at each point will be very severe; the former sites of injection will all react again; the patient will have a fever, be nauseated and ill. The proper method to follow in such a case is to allow the first reaction to subside entirely, then begin with a very small dose, 2 or 3 minims, and allow each reaction to subside before giving the one following; and in a short time it will be found that the size of the injection can be gradually increased until a full tube of the serum is given every second day without any disturbance whatsoever. So severe a reaction as that just described is not a common event. In most instances serum can be given with only a slight area of local reaction and no general disturbance. Very rarely the writer has obseved a reaction which shows some of the phenomena of an anaphylactic disturbance. This occurs only very rarely indeed, and seems to bear no relation whatsoever to the amount of serum injected, the interval between the injections, or the length of time which the patient may have had serum given. He has observed it to occur after the patient has had serum for three months at intervals of two days. The injection is followed almost immediately by a very severe pain in the back, difficulty in breathing, which may amount to a fairly marked dyspnea, swelling of the eyelids, nose, lips, ears, and marked cutaneous flushing. In two or three instances there has been a short period of syncope. These symptoms very promptly pass, and the patient is soon quite all right again; but after a reaction of this sort it is unwise to inoculate again for a period of two or three weeks. If another inoculation is made within two or three days, the same phenomena are likely to occur again, not invariably so, and it is not possible to quote a very large number of cases on this point because the reaction is so rare; but in most instances in which injection was given again after an interval of two or three days, there has been a development of a similar disturbance, perhaps more severe than that noted at first, and it is best, therefore, to allow a period of two or three weeks to elapse before another injection is made, and then to start in with a small dose, not more than 3 or 4 minims. In one patient such a reaction occurred at three different times, without previous warning, at intervals of about two months. In most cases, however, absolutely no difficulty will be experienced in the administration of the serum.

The length of time which the serum will need to be continued depends a great deal upon the character of the case. The cases that are treated very early in their development may need to have serum given only for a period of three or four months, while in others that have existed for a longer time it may be necessary to give serum for eight, ten or twelve months. One point it is very necessary to bear in mind, and that is that after the patient has been restored to apparent health it is not safe to stop the injection suddenly. The interval between them must be gradually increased until finally an injection is given once every eight or ten days, and it may be necessary to keep up the treatment at this interval for four or five months before it is safe to allow the patient to go free entirely. If the treatment is interrupted when the patient has made very satisfactory improvement

and is apparently well, the good conditions are likely to continue for six or eight weeks, and then show a gradual return of the disease. A re-development of the symptoms means that serum must be given again immediately, and a relapse is in most cases readily controlled by this means, but it sometimes happens that a relapse is much more difficult to control than a primray attack.

One further point which should be discussed with reference to these cases is the use of iodine. Since the discovery that the thyroid gland has a secretive absorption for iodine, and that its physiological activity depends upon its iodine contents, there has seemed to be good ground for the use of iodine in all forms of goitres. Such a conclusion needs to be accepted, however, with a large degree of reservation. Iodine administration to a patient with goitre should be begun with a great deal of care. Particularly is this true with respect to those patients having marked symptoms of thyroidism. In the writer's judgment iodine administration should always be begun with small doses, not more than one grain three times a day. With an active gland the administration of iodine may only feed a flame, and the patient should be under constant observation so that its administration may be stopped instantly when it proves to be injurious. Many comparatively harmless goitres can be started to a dangerous activity by the injudicious use of iodine. Recent experiments indicate that the restoration of an active hyperplastic gland to comparatively normal histological conditions is favored by iodine administration, but it must be remembered that such a gland is capable of using this iodine in the proportion of more active secretion, and iodine administration is in such cases physiologically equivalent to the administration of thyroid extract.

In conclusion, I wish again to emphasize that there is no more important feature in the medical treatment of Graves disease than an early accurate diagnosis.—*N. Y. State Jour. of Med.*

NOGUCHI'S LUETIN.

Dr. Noguchi's luetin test for syphilis has already become famous. Many of us heard his lecture with the exhibition of cases, delivered before the American Urological Association in April; and again his scholarly discussion of Dr. Fordyce's paper in the Symposium on Syphilis at the late meeting of the American Medical Association. It is rare that so full and complete a report of Dr. Noguchi's lectures is made as that executed by Zeit at the Northwestern University Medical School, when a dissertation on the cultivation of the treponema pallidum along with a description technic of a test that bids fair to supplant the Wasserman reaction.—(F. L. H.)

"The cultures are made by using fresh chancres, condylomata or papules, rich in spirocheaetes. The lesion is cleaned with sterile salt solution and a piece snipped off and put into sterile salt solution, containing 1 per cent sodium citrate. The piece of tissue is then cut up into small pieces and one of these is emuslified in a sterile mortar with citrate salt solution.

"A number of high culture tubes are used, containing a piece of rabbit kidney or testicle with 2 parts 2 per cent (slightly alkaline) agar and 1 part ascitic or hydrocele fluid, on top of which, after solidification, is placed 3 cc. sterile paraffin oil.

"Into each tube a small piece of the tissue, containing spirochaetes, is pushed to the bottom of the tube. A few drops of the emulsified tissue is then injected by means of a capillary glass tube without tearing the culture medium. After 2 or 3 weeks' incubation a diffuse opalescence outside of the stab indicates spirochaetae growths. By means of capillary glass pipettes, avoiding the central stab (contamination), the material from the diffuse clouds in the medium outside of the stab is taken up and examined for spirochaetes.

"Some of this material, demonstrated to the writer, contained dense masses of characteristic spirochaetes when examined with the dark field slide, as numerous as we see them in the adrenal, liver and spleen in cases of congenital syphilis. The cultures had no foetid odor. Those which have are contaminated.

"Pure cultures only are used for transfers to a large number of other tubes, by means of a pipette and syringe. After 2 or 3 weeks' incubation the same procedure is repeated until no more bacteria grow along

the central stab, the spirochaetes always growing in diffuse clouds towards the glass from the central stab into the surrounding medium. It is essential that the cultures are all grown under strict anaerobic conditions in a Novy jar, displacing the air by hydrogen and absorbing the last traces of oxygen in the jar by pyrogallic acid and potassium hydrate.

LUETIN REACTION FOR THE DIAGNOSIS OF SYPHILIS.

"Luetin is produced by grinding up the culture medium, containing colonies of spirochaetes in the form of diffuse clouds in a sterile mortar. The thick paste is gradually diluted and 0.5 per cent carbolic acid or 0.3 trikresol added, heating to 60 degrees C. for 1 hour.

"Dermal injections of Luetin are made in one arm, the other arm being used for control by dermal injection of sterile culture medium prepared in the same manner as Luetin, minus the spirochaetes. About 0.05 cc. Luetin is injected intradermal, a whitish swelling appearing, the size of a split pea.

"In a positive reaction the point of injection is marked by an erythematous area, in marked contrast to the control, and after 48 or 72 hours an induration appears or an indurated papule, 5-10 mm. in diameter, surrounded by a diffuse zone of erythema. The induration and inflammation disappear after four days. In some cases a pustule forms, mostly in tertiary cases.

"Constitutional symptoms, temperature, malaise, diarrhoea, anorexia are rare.

"The reaction is absent in primary and early secondary cases. The Wassermann reaction is more constant in primary and secondary cases. The Luetin reaction may still be positive after treatment has changed a positive into a negative Wassermann reaction.

"The Luetin test, therefore, appears to be especially applicable and of great value in the diagnosis of late stages of syphilis, and for the determination of a cure because it remains still positive after a Wassermann test, as the result of treatment, has become negative.

"When the future history of the etiology of syphilis is written Noguchi will be credited with having dispelled the last doubt and the last discrepancies with regard to the spirochaeta pallida as etiologic factor by fulfilling the final and most important demand of Koch's laws, the production of the disease by pure cultures. Schrereschewsky and Muhlen's cultures were nonpathogenic, produce no odors and his Luetin (ground-up spirochaetes) gives specific diagnostic skin reactions."

The May issue of the *Cleveland Medical Journal* comments editorially on the three reactions interestingly, as follows:

"The cultivation of *Treponema pallidum* has given us still a further reaction. In tuberculosis the tissues become sensitized to specific protein substances produced by the destruction of tubercle bacilli within the body. This sensitization is manifested by the general or localized reactions which occur after the injection or the introduction of tuberculin, which contains the specific bacterioproteins derived from pure cultures of *Bacillus tuberculosis*. The luetin reaction of Noguchi indicates that a similar phenomenon of sensitization may occur in syphilis. In certain cases of lues the introduction into the skin of an emulsion made from killed pure cultures of *Treponema pallidum* leads to a localized reaction. This occurs in cases in which the duration of the disease has been of such length that the formation of a sufficient amount of specific proteins has followed the constant slow destruction of the organisms, or in those cases of shorter duration in which a massive destruction of the organisms is brought about through energetic treatment.

"In syphilis we have, then, three reactions: the original Wassermann or lipotropic reaction, the *pallidum* fixation reaction and the luetin reaction. Although we are convinced, because of the theoretical considerations which have been outlined, that the Wassermann reaction is not a specific luetic reaction, it is too early to say that we must alter any of the conclusions which have been drawn from the use of the Wasserman test, or that the *pallidum* fixation reaction or the luetin reaction will give diagnostic results of greater value than the Wassermann reaction. What is already evident is that through the comparative use of these three reactions there are opened up,

in the case of syphilis, opportunities more wonderful for the study of the biological mechanisms concerned in a specific disease than are available in any other pathological condition."

F. LEM. H.

THE MEDICAL KNOCKERS' CLUB

By Irving D. Steinhart, M. D.
NEW YORK CITY.

A remark made to me not long ago by a rather well known member of our profession gave me the idea of the little sermonette that I am going to preach. "Many of our medical societies have large memberships," he said, "but none of them could ever hope to have a membership roll the size of a Medical Knockers' Club, if such a club were formed and all those eligible for membership were to join it." Not a very pleasant thing to have said about us, but not an altogether untruthful one.

It seems to be a favorite pastime with some members of our learned profession to constantly criticise the doings of their colleagues. It would not be so bad if their criticisms were just ones, but most often they are not. It also would not be so bad, although it would be bad enough, if the criticising was done within medical circles, but it is not. The medical profession as a whole has nothing to gain by such acts of any of its members, but can only be injured by them. We cannot expect the public to have respect for us men or for our profession if we, or a certain part of us, are constantly "knocking" each other in public.

The medical profession has nothing to conceal nor hide from the public gaze or scrutiny, for if anything were wrong with the profession the public would have a very great right to know it and know it promptly. That is not what I am driving at. I refer to that mean petty spirit of jealousy that causes one medical man to belittle the work of a colleague to the laity. The offense is a more flagrant one when the criticism is a totally unjust one. The motive, of course, is a very plain one. Increase of Dr. Knocker's practice at the expense of his colleague. We are none of us infallible, none claim to be except Dr. Knocker, therefore it is quite true that perhaps in some cases mistakes in diagnosis may be made and even mistakes in treatment with the correct diagnosis—but in this latter regard who is going to judge which is the best treatment in many conditions. Certainly not the laity, and when Dr. Knocker holds forth to them on the short-comings of any of his reputable colleagues he is not endeavoring to advance medicine any, but has only his personal interests at heart. His attempts to advance his own interests, however, are costly to the rest of the medical profession, for his constant "pinning of medals upon his manly (?) breast" is undermining for all of us, including himself, the confidence of the public, who wisely wag their heads and say: "When one who belongs to the profession is constantly knocking it, there must be a good reason for it"—and the quacks and others of their ilk laugh long and heartily among themselves, in high glee as they see the public being driven to them for treatment for their ills, by the very ones who are supposedly their worst enemies, viz., the regular profession.

You cannot attempt to criticise a colleague to the public without injuring yourself, either at once or in the long run. The public may listen to you for a while, but remember that the public is very fickle, and a reputation built up by throwing stones at others will very soon crumble to pieces and leave you discredited and without a friend either in or out of the profession. In our medical societies among ourselves, let us do all our criticising of each other that we will, but even then in a spirit of honesty and not jealousy. Let it be a sincere desire to correct or improve and not merely a malicious desire to injure or decry. Let us do our criticising, even in our medical societies, with the one criticised present, so that he can let his side be heard also and the matter be judged on its actual merits. "Knocking" a doctor in his absence to the laity, or even to a fellow colleague, is unworthy of a member of the medical profession, and yet how often is it done. I have had it done to me and you have had it done to you, but I hope and am quite sure that I have never been guilty of making myself eligible for the Medical Knockers' Club.

No patient can abuse or criticise a doc-

tor to me. My invariable answer to such an attempt is that no physician cares to have a colleague talked about to him in any but a pleasing manner, and that unless they wish to praise my predecessor to please not say anything about him or even tell me his name. I take the trouble to explain to the patient that every doctor does his best under all circumstances, and that he has no desire to lose by death or otherwise any of his patients. They are his bread and butter to him and other things besides. That no physician can be perfect in all of the numerous divisions of medicine and that no one can do better than his best in any line of work, medicine or otherwise. Even if the doctor in question has been wrong the patient will discover, under my guidance, that he was benefited very much, and that all I am going to do is to put on the finishing touches for the other doctor. There is no use in "knocking" a colleague to the laity, no matter what your private conversation with him afterwards may be. No, I don't mean that in consultation the consultant should uphold the family physician if he is wrong, for that would be the worst kind of fraud, humbug, and dishonesty, besides allowing harm to come to the patient. But even here the consultant's manner can be such as to avoid injuring the reputation and feelings of the regular medical attendant. Increase your prestige if you will but not at the expense of the other fellow.

Remember that when Mrs. A. comes into your office and tells you how much she has heard of you and how poorly she was treated by Dr. B. you had better collect cash for any service you may render her because probably her main reason for prefering you and disliking Dr. B. so suddenly is because he asked that she settle a long overdue bill. He was a very good doctor for her until he looked for real spending money for his services instead of promises. You will be the same to another later on when you look for a cash settlement, and you will feel rather cheap if you have allowed her to abuse Dr. B. to you.

Let us be kind, courteous and helpful to one another, trying to advance the interests of each other. Ours is a gentleman's profession and the just mentioned qualities are part of the natural endowment of every gentleman. By honest criticism delivered to us at the proper time and place we learn and therefore advance ourselves and enhance our value to the public. No fault attaches to the physician who makes an honest mistake but it is a most serious fault if we lower the high tone of the profession by making ourselves eligible for the Medical Knockers' Club, the members of which seek to advance themselves by uncalled for, and sometimes untruthful, criticisms of their colleagues, delivered especially to the public.

Dr. Knocker can always do better than anybody else in everything. Positively hopeless cases, bereaved families are informed, would have been saved had he been called, and the grieving members have added to their sorrow the torturing thought that they did not do all that was possible to save their beloved one from death. Dr. Knocker could have cured all surgical cases by medical means, he assures the friends or family of all surgical cases that he hears of, and saved the expenses and worry that a surgical case brings. Oh, yes, the surgeon who had charge of the case was a very fair one, but—etc.; and in the tone of the "but" plenty is said to Dr. Knocker's credit. Dr. Knocker has a list of the most marvelous cures he has made after the various patients have been given up by the most famous physicians and surgeons. "Modesty" with a large capital M has prevented him from making these cases known to anyone except the public. He has never published them in medical journals or announced them in medical circles because he did not wish to make his colleagues feel ashamed of their stupidity as compared with his great intellect. But why go on. You have all met a Dr. Knocker. You know how much you liked him. Moral:—Don't belittle yourself or your profession by being like him.—*The Critic and Guide.*

Hemmeter recommends in rhus poisoning an alkaline hot bath to be followed by a scrubbing of the parts with green soap and 85 per cent, alcohol. After drying, ung, hg. flav. with ½ grain morphin to the drachm, is freely used. At night there is great relief from the irritation by applying abrenalin chlorid in very dilute ointment form.

The West Virginia Medical Journal

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Editorial

The physician is the only professional man in the world who devotews the best energies he has to combating the conditions whose existence is supposed to furnish him a livelihood. The learning, research, and untiring labor of every medical association in Europe and America are directed to the discovery and eradication of the causes of disease.

GEO. F. BUTLER.

AN APOLOGY.

Since our editorial in last month's issue of the JOURNAL, entitled "A Protest," was printed, we learn that the Governor, and not the Board of Control, is responsible for the appointment criticized. We at once wrote an apology to the Board, and desire here to give our explanation the same publicity as the editorial received. The Governor received a copy of the JOURNAL as soon as issued, and although we do not suppose he is losing any sleep over the matter, we hope he may be led hereafter to give some consideration to those physicians who, in an organized capacity, have been long working in the interest of the public welfare. We commend to his prayerful consideration the sentiment above quoted from Geo. F. Butler, an eminent Chicago writer.

We are old-fashioned enough to believe that in filling public positions a governor should select the very best men the state affords. We hope our next governor may be a man of the same mind, and he will do well, when medical appointments are under consideration, to seek the counsel of those who, by reason of society affiliations, know who the best men are.—S. L. J.

THE CANCER PROBLEM.

It is true, as emphasized by Prof. Ewing, of Cornell University, that the significance of the cancer problem is a subject which rarely reaches the attention of the layman and is only vaguely appreciated by most physicians.

According to the statistics of the Registrar-General of England, of women living at the age of thirty-five years *one out of nine dies* of cancer. While proof is very difficult to obtain in this field, there is a strong and growing impression among surgeons that cancer is steadily increasing, and it is easy to see that the increased tenure of human life which has resulted from recent progress in such matters as the use of diphtheria antitoxin, the hygienic control of the diseases of infancy, the partial suppression of tuberculosis, and the general progress of the medical sciences, permits an increasing number of persons to live to adult and middle life and thus reach the cancer zone. Therefore, as Prof. Ewing observes, if present factors continue unchanged, an increasing proportion of what is gained by the improved hygiene of infancy and youth will be sacrificed to cancer. The grave question might be raised, whether it were not better to die of diphtheria than to enjoy an uncertain period of adult existence only to meet the ordeal of death by cancer. For, while the alleged sufferings of laboratory animals are deemed a fit topic for eploitation in the newspapers,

those of the cancer patient are suppressed and are rare topics of conversation among physicians. One does not find them detailed even in text-books of medicine. In view of this situation all thoughtful persons may well ask—what is the medical profession doing for cancer? Certainly this question is adequately and eloquently answered in the elaborate work of Wolf, *"Die Lahre von der Krebskrankheit,"* and quoted freely by Ewing in his paper bearing on this subject.

Many of the greatest minds in medicine have in every age directed their attention to this subject, and in recent times, since the introduction of the microscope, great progress has been made in the knowledge of the cancer process, through the labors of Virchow, Lebert, Waldeyer, His, Remak, Cohnheim and many others. Another fact stands prominent in this history, that with the great advances in the knowledge of the cancer problem, the power of the physician to control cancer has made practically no essential progress. Today, as in the Middle Ages, early and complete removal by the knife is the weapon of defense against this disease.

It is known to every surgeon that the operative treatment of cancer is unsatisfactory. Too often the growth is inoperable when first discovered or when receiving operation, and we are grieved and depressed at the discovery of its early recurrence, for only about one-fourth of all operative cases are cured. We are obliged to confess that the true nature of this mysterious and dreaded disease has not been understood; no germ has been discovered which could be held responsible for it, and all heralded discoveries have proved illusory. But, as was mentioned in the public address at our recent meeting at Webster Springs, the past five or six years have witnessed unremitting toil in the various research laboratories. Let us be thankful that, through the munificence of a few interested philanthropists this cancer fight has become as broad as the nation itself, and the struggle will not cease until this dreaded foe to mankind has been vanquished, claiming as it does 75,000 victims annually in this fair land of ours.

Perhaps the most important new facts may be summed up in words of Wachenheim:

"Investigators bethought themselves to study animals having tumors that resemble human cancer in structure and malignancy; in this respect mice have furnished valuable investigating material, and even in these few years have demonstrated certain valuable facts, especially that cancer is transplantable, but not infectious in the primary sense, like tuberculosis.

"There has also been achieved an immunization of mice against the recurrence of cancer after operation."

Indeed much new material has been added to the wealth of knowledge which has come to us direct from the laboratory, and while the end may not yet be within sight as the great Ehrlich has enthusiastically prophesied, yet enough is definitely known to dispel much of the gloom which has hitherto enshrouded this problem.

F. LEM. H.

LOOK ON THE DARK SIDE SOMETIMES.

A physician in a certain part of this state was called to go seven miles in the country to see a man who had consulted him the day before for some supposed stomach trouble. He went back the next day and the next, the patient growing apparently worse all the time. At midnight of the third day another physician was called, but did not respond until the next morning. This physician found locked bowels with rather strong indications of appendicitis and immediately sent for the first physician, with the opinion that probably an operation would be required. Late in the evening of the same day the regular physician arrived, bringing with him a surgeon from the city. The surgeon diagnosed the case as appendicitis, and locked bowels as a consequence but declined to operate on the ground that the condition of the patient was such that he could not stand the anesthetic. The patient lived two days longer, a slight action of his bowels occurring just before death.

It is our humble opinion that in West Virginia during the last ten years at least a hundred persons have died under very similar circumstances, and every one of them probably might have been saved had the country physician first called investi-

gated his case a little more closely. We are not censuring the country physician, nor comparing him with his city co-worker, but it is nevertheless true that all physicians are inclined to do routine work and to look too hopefully upon all cases and neglect thorough and careful examination in all cases which are in the least suspicious.

G. D. L.

While the lesson here pointed out is a valuable one, we may add that a diagnosis of "locked bowels," or obstruction of the bowels, is one too often made in cases of appendicitis. According to the best authorities, in appendicitis a condition of locked bowels is very desirable. In other words, it is very improper treatment to try to move the bowels in a case of suspected appendicitis. When several of the well-known symptoms of this condition are present, keep the bowels as free from peristalsis as possible. Far better to risk a day or two longer of constipation in a simple case of this condition, than to risk doing damage by the use of cathartics in a case at all doubtful. Somewhat recently a little patient was brought to the writer a distance of eighteen miles, with a diagnosis of "obstruction of the bowels." This was on the seventeenth day of the illness. An examination very easily determined the existence of appendicitis in the suppurative stage, and the next morning at least six ounces of pus was evacuated, followed by a very long convalescence and narrow escape from the death of an only child. Such errors ought not to be made in this day of advancement in medicine. "Better look on the dark side," and always remember that abdominal pain, tenderness, fever, muscular rigidity, even—as illustrated by a case now under the writer's observation—when not strictly localized point strongly toward the existence of appendicitis.—S. L. J.

We are indebted to President-elect Hupp for a number of interesting selections which will appear from time to time in the Outlook department. Were all of our members as industrious as Dr. Hupp, our JOURNAL and association would rapidly grow in value and influence.

Dr. John Boyce Donaldson, Canonsburg, Pa., died, Jan. 29, 1912. Dr. Donaldson was the most efficient secretary of the Washington Co. (Pa.) Medical Society and was president of the Pennsylvania State Society in 1910. The doctor was one of the most active and earnest workers in the profession. Through his efforts, the first county society bulletin in this country was started. Thirty-two societies in Pennsylvania now publish bulletins. Dr. Donaldson's work will live after him. The following is an example of his vigorous style of writing, no less than of his ethical standard:

THE ETHICAL SNEAK THIEF.

You no doubt know these who, clasping their hands and raising their eyes towards heaven, assert that others may do as they think best, but as for them and theirs they are strictly ethical. Selah! These are they that steal your patients by looking shocked when some part of your treatment is being told, or by keeping silent when he should defend you, by making needless examinations, and saying "and did your doctor tell you that," with emphasis on the that. He smells your medicine, corks it up hastily and hands it back to you without a word, but proceeds to write a new prescription. This kind are hard to name, and stay within the bounds of publishable words. The kind that makes you want to hire a man who can do it justice. The kind of pious old saint who tells the woman of the family all about it after you have left the house. You know him. Of course you do. Makes long prayers in the synagogue. Calls the Lord up next morning and asks him if he got that message? O, he's hard to beat.—Washington Co. Program.

A JUST CHARGE AND A SANE VERDICT.

Willis V. Cole, a Christian Science "healer," was on March 30th, in the Criminal Branch of the Supreme Court in New York City, convicted by a jury of practicing medicine without a license. Justice Seabury charged that "one who holds himself out by sign, card or public advertisement as being able to cure, treat or prescribe for any human disease, pain, deformity or ailment, and who maintains a public office to which persons may come for treatment, and who receives a fee, is engaged in the practice of medicine under the meaning of the law." "I charge further," continued the Justice, "that even though surgery is not resorted to and no drug is used, and also even though the person so holding himself out engages in prayer, he is engaged in the practice of medicine under the meaning of the law." Justice Seabury mentioned also a decision of the United States Supreme Court, in which the right of the State to interfere in matters of health is upheld, even though religious tenets were alleged in opposition to such interference.

Cole was fined $100, which he paid in Court.—Ed. American Practitioner.

(Have your county newspaper copy this.—EDITOR.)

CANCER—A PREVENTABLE DISEASE.

The heavy and increasing death-rate from cancer demands vigorous action by the medical profession and the public. Apparently the cancer death-rate has more than doubled in the past 30 years, claiming in this country at least 70,000 lives annually. Is this increase real or only apparent? Careful interpretation of statistics compels the belief that the increase is actual. The greater accuracy in reporting and in diagnosis cannot account for such a tremendous rise in the mortality from a disease that has been known since remote antiquity, and in most instances is easily recognized in its fatal stages. Those who question this view must explain why external and superficial cancer has increased more than 37% in the past seven years, notwithsanding the great improvement in surgical methods of cure.

What do we really know about cancer? Very little more than was known to Hippocrates, who described it in the fifth century B. C. Millions of dollars and probably a ton of highly organized brain matter are now employed in the effort to discover a "cure," or at least a cause for this malignant scourge, but neither the money nor brains so lavishly expended has thus far brought the coveted knowledge.

What can we do about cancer? A great deal more than in the days of Hippocrates, and even more than the surgeon of two decades ago, in these days of painless, aseptic, wizard-like surgery. In the absence of any knowledge as to the specific cause of cancer, its non-preventability seems to be taken for granted by the public and even by many physicians. The attack upon tuberculosis is making headway mainly because it includes a widespread propaganda for prevention as well as cure; but cancer, with its appalling and increasing death-rate, is permitted to ravage unchecked—the opprobrium of "last-resort" surgery—while our laboratories are feverishly but thus far futilely seeking a specific cure.

Why is there no organized effort to educate the public regarding the preventability of this disease and the simple means that would probably suffice to cut the death-rate in half instead of allowing it to double in three decades?

Is there a cure for cancer? Yes, in its early stages—the knife.

Is there a preventive of cancer? Yes, in the pre-cancerous stage—the knife.

Probably a fourth of the death-rate from this malignant but often painless disease is due to the ignorance or neglect of its early manifestations and another fourth to procrastination in seeking surgical relief after the disease is positively recognized.

Unreasoning dread of the knife and a mean-spirited fear lest a surgeon should operate unnecessarily also contribute to the cancer holocaust.

Here are a few points for people to remember who wish to avoid cancer:

Moles, especially growing moles, warts, irritable scars and all such excrescences and tissues of low vitality invite the attack of cancer. Their removal is a simple matter, and relieves humanity of just so much cancer soil. The only good tumor is a tumor that lies on the operating table. In the body many tumors remain innocent and benign, but sometimes—and they never ask your permission—they become malignant. Out of the body they can never harm you. If you have a tumor, chronic swelling or chronic ulcer, especially of the lip, tongue or breast, seek surgical advice and act promptly if operation is advised. Avoid constant irritation of skin, tongue, lip or other portion of the body by pressure or friction, as by pipe-stem, cigar, jagged tooth, etc. Give no heed to well-meaning people who advise against operation, and recite wonderful cures of dear friends who used "Mothers Salve," "Anti-Cancerine" or other marvelous remedies. The X-rays and radium have their place, but only when the knife cannot be used.

There is no need for hysterical alarm over the presence of moles, warts or other excrescences. Every ulcer is not an epithelioma, neither is every enlarged gland or swelling a future cancer, but many future cancers will arise in such tissues, and the wisest plan is to fortify your body against attack.

Operation in internal cancer is now fairly successful in the early stages. Chronic disease of stomach, intestine or other internal organ should not be allowed to continue very long without surgical consultation, especially if the subject is over forty.

There is reason to believe that the high and increasing death-rate from cancer is a manifestation of life-strain and over-civilization. Temperance, especially in eating, drinking, smoking, etc., are valuable general preventive measures. Cancer can be found in many family histories, but there is little proof that it is transmitted by inheritance. There is much groundless apprehension regarding the influence of heredity.

While awaiting the often-heralded but as yet elusive "Cancer Cure" give the surgeon a chance to cut the cancer death-rate in half. He can do it. —*Postal Life Insurance Company Bulletin.*

THE AMERICAN FEDERATION FOR SEX HYGIENE, ITS OBJECTS AND PROPOSED METHOD OF WORK.

The following scheme of work, submitted by the President, Dr. Prince A. Morrow, to the Executive Committee at its meeting March 4th, 1912, was indorsed and ordered printed:

The primary and specific object of this organization is study and application of all means, educational, sanitary, moral, and legislative, which promise to be most effective in preventing the spread of vice and its disease.

The Federation proposes to bring this work chiefly along educational lines. The educational campaign includes—

1. Enlightenment of the public in the knowledge of the enormous prevalence of venereal eases, their dangers to the public health, and especially the dangers to the family and the race from their introduction into marriage.

2. The education of parents to the great importance of instructing their children at an early age in the origin of life and the facts of sex.

3. The education of young people in the physiology and hygiene of sex, through the introduction of sex teaching in schools and colleges, as a necessary and integral part of a rational education.

The chief features of this educational policy are publicity and sex instruction. The methods which are now available and which promise to be most effective, are lectures and conferences and the distribution of educational literature.

The Federation proposes:

(a) The organization of a corps of lecturers chosen for their special fitness for this work, who shall address public audiences of men and women and various social groups throughout the country.

(b) The wide distribution of educational literature and the giving of lectures, in the Y. M. C. A.'s, the Settlements, large Industrial Organizations, Trades and Labor Unions, to the employees of Railway and Street Car Companies, Factories, Department Stores, Army and Navy people, etc., and to secure the co-operation in this educational work of Employers' Associations.

(c) The establishment of educational centers in cities and towns which shall carry on local educational work, in co-operation with the various societies composing this Federation, and the formation of similar societies in cities where they do not now exist, in order to increase the active working forces of the Federation.

(d) The preparation of a Sex Hygiene and Eugenics Exhibit which shall be exhibited in all the large cities of the country.

(e) The selection of an Advisory Committee of trained experts consisting of leading educators, sociologists and physicians, who shall pool their wisdom in the formulation of the matter and methods of sex instruction in schools and colleges, the preparation of suitable text books on sex education, and to make a digest of existing sex literature with a view or recommending judicious books to the public for general reading.

(f) The establishment of special courses in schools of pedagogy, teachers' colleges, and normal schools, for the purpose of preparing teachers to impart sex instruction wisely and effectively.

(f) The enlightenment of advanced students in high schools and colleges, through medical lectures, of the nature and dangers of venereal diseases and their modes of contagion direct and indirect.

(h) To enlist the co-operation of Boards of Health, state and municipal, in securing the Health Department control of venereal diseases; to demand hospital treatment of all cases of venereal diseases which are not or cannot be properly treated in private practice; and to urge upon municipal and state authorities the necessity of providing larger and more adequate facilities for the treatment of venereal diseases in order to promptly sterilize sources of contagion and thus prevent the infection of others.

(i) To study the fundamental causes of prostitution and the social and economic conditions of which it is the out growth, in order to apply fundamental remedies.

(j) To co-operate with existing agencies for suppressing the affluents of prostitution, such as the White Slave traffic, dance halls where liquor is sold, steamboat and beach excursions, indecent posters, demoralizing plays, obscene literature, etc., etc., and the enforcement of the laws for the suppressionn of public prostitution.

(k) To secure legislative enactments for the protection of female minors, to throw sanitary safeguards around marriage, and to utilize all agencies under social control to prevent the marriage of the unfit and defectives who are fated to propagate their kind.

CHURCHES TO DENOUNCE CURE FRAUDS.

From thousands of pulpits in all parts of the United States fake cures for consumption will be exposed and denounced on Tuberculosis Day, October 27th. This is part of the program for the movement announced today by the National Association for the Study and Prevention of Tuberculosis.

Literature giving information on fraudulent and alleged "cures" for consumption will be sent to clergymen all over the country, and an organized crusade against the traffic in these drugs and devices will be instituted. The literature will be sent to ministers either directly from the National Association office in New York or through the many state and local anti-tuberculosis associations scattered throughout the country. It is estimated that over 100,000 clergymen will be reached in this way.

From actual records on file in the office of the National Association it is estimated that the volume of business done annually by the various concerns who sell fake remedies for tuberculosis amounts to well over $15,000,000. The number of these remedies now being used as so-called "cures" is over 500.

Three classes of "cures" are distinguished by the National Association. In the first class are included hundreds of devices and drugs which can be bought for any sum ranging from ten cents to five dollars at a drug store. The second class of "cures" includes the "institutes," "professors" or companies of "doctors," who for a consideration guarantee to cure consumption by some secret method of which they are the sole proprietors. There are nearly one hundred and fifty of these institute frauds in the United States, cheating the people out of millions of dollars annually.

In the third class of "cures" are placed a number of home-made remedies, which either through ignorance or superstition have been advanced as treatments for tuberculosis. Some of these are onions, lemons, rattlesnake poison, coal dust, lime dust, pigs' blood, dog oil, milk "strippings" and even alcohol.

None of these remedies will cure consumption, declares the National Association. No drug, gas

or other material has yet been discovered which, when eaten, inhaled or injected into the system, will kill the germs of tuberculosis without doing serious injury to the body. The only real cure for tuberculosis recognized by the National Association consists of the combination of fresh air, good food and rest taken under the direction of a competent physician.

To the Readers of the West Virginia Medical Journal:

About six years ago the writer began to use vaccines in the treatment of typhoid fever. Since that time he has thus treated more than one hundred cases and has obtained numerous articles upon the same subject written by physicians in various parts of the world. It seems possible, however, that some may have escaped notice. He also realizes that many of the profession may have treated some cases without reporting them. A paper upon the subject is now in the course of preparation. In this it is earnestly desired to incorporate reports from a large number of cases, good, bad, and otherwise. He accordingly makes the following request to the readers of this journal:

Will any one who has used vaccines in the treatment of typhoid fever, whether but once or more, kindly communicate to him that fact, accompanied by name and address of the reporter. If the results have already been reported, a note to the journal in which they appeared will be sufficient. If they have not been reported, a short blank form will be sent to the physician to be filled out. Due credit will be given in the article to each person making a report.

Reports of cases will be accepted at any time in the future but preferably by November or December of the present year.

Kindly communicate with Dr. W. H. Watters, Director of the Department of Pathology and Bacteriology, Evans Institute for Clinical Research, Boston, Mass.

The fourth annual meeting of the American Association of Clinical Research will be held in New York City, at the Academy of Medicine, on November 9, 1912.

Notable contributions on the Negri Bodies, on certain Fluids for Tubercle Bacilli in the Urine, on Adjustment and Function, on Psychoanalysis and Traumbedeutung, on a Pandemic of Malignant Encapsulated Throat Coccus, on The Single Remedy on Indicanuria and Glycosuria, on Disease Coditions expressive of Correct Diagnosis, on Biochemic Problems, on the Two Most Far-Reaching Discoveries in Medicine, and others are to be given. Every member of the Association is cordially invited to contribute a paper. The title should be sent at once to the Permanent Secretary, so that the program may be completed.

THE JACKSONVILLE MEETING OF THE SOUTHERN MEDICAL ASSOCIATION.

If present prospects are realized, the meeting of the Southern Medical Association at Jacksonville, Fla., November 12, 13 and 14, 1912, will be one of the most notable gatherings of medical men ever convened in the South. Conditions are ripe to insure a large and important convocation of physicians from every city, town and hamlet in the Southern States. The prevalence, spread, and persistence of pellagra, the ever-increasing interest in the study of malaria, and the alarming imminence of a pandemic of plague would in themselves be sufficient to insure a large and interesting meeting, but when to these opportunities for study and information are added the natural attractions of Jacksonville and the extensive preparations its physicians are making to insure visiting doctors and their families a "good time," the combination is simply irresistible.

State News

The following resolution was adopted by the State Board of Health at the meeting in Charleston, in July. We commend the Board for its efforts to raise the standard of medical education, and hope the medical colleges will take notice.

"Be it resolved, That the State Board of Health of West Virginia will not recognize candidates for examination who have graduated after July 1913 from any college, school, or university whose standards are less than those recognized in Class A and B of the Council on Medical Education of the American Medical Association."

We are glad to know of the organization of a live society in Upshur County. An account of the organization will be found under Society Proceedings.

In the Bulletin of the Medical College of Virginia we find the name of T. N. Broaddus, M.D., as Instructor in Physiology; Clinical Assistant in Practice of Medicine; Clinical Instructor in Gynecology. T. L. was for several years a hustling pill roller in the Wallace Pharmacy, Wheeling Island. We congratulate you, Wash, on this evidence of your success.

Ex-President T. W. Moore of Huntington, recently read a paper before the American Academy of Ophthalmology and Oto-Laryngology. We hope to have it for publication in the Journal.

Dr. E. W. Strickler, late of Kingwood, is now in Chicago taking a post-graduate course of instruction. On his return he has made arrangements to locate in Fairmont. We hope the doctor's merits as a surgeon will be early recognized.

The editor recently enjoyed a short visit from the ever-youthful Dr. C. H. Maxwell of Morgantown.

Dr. I. B. Johnson, of Lanesville, is now taking a post-graduate course at the New York Polyclinic Hospital and Medical School.

The Wheeling Board of Education recently

did a very wise thing in appointing as Medical Inspector Dr. R. C. Drinkard, a graduate of Johns Hopkins, who has the respect of all Wheeling physicians; also as Public School nurse Miss Clara Ross, a graduate of the City Hospital School for Nurses. Both are excellent appointments.

Walter Buddenberger, an osteopath, of Wheeling was recently arraigned in police court charged with violating the Health Ordinance by not reporting a case of diphtheria. Dr. McLain, Health Commissioner, alleged that the defendant had failed to report four cases of this disease he was attending. It is said he called the cases tonsolitis. A fine of $10.00 was imposed.

We are glad to learn that Dr. J. E. Rader has so far recovered from recent illness as to resume his professional work.

Dr. C. E. Watson, late of Morgantown, has removed to Kingwood.

Dr. Harry Hubbard, late of Wheeling and a member of the late legislature, has removed to Maryland. It is reported that he is engaged in farming.

Dr. Harriet B. Jones, of Wheeling, has purchased property at Glendale, Marshall County and expects soon to locate there. She will be missed in Wheeling, where she has been active in every good work for the improvement of the city morally and physically.

Dr. G. D. Johnson, late of Kenova, has moved to Kentucky to engage in practice in the coal fields.

Dr. J. W. Rife, of Wayne, has moved to Kenova and is associated in practice with Dr. T. N. Goff.

Dr. C. C. Hogg has been re-employed by the Huntington Board of Education as medical inspector of schools.

Dr. Wm. E. Neal, of Huntington, was recently married to Miss Susan Witten. We wish for the young people great joy.

We extend to our worthy colleague, Dr. L. D. Wilson a glad welcome home from his two months' visit to the Pacific coast cities. He arrived home on the 2d of the month.

Dr. C. A. Wingerter has just returned home from a six weeks' post-graduate nourse in nervous diseases at Fordham University, New York

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THE MEDICAL SOCIETY.

The leaders in medical thought are the men who have made it a part of their professional duty to attend medical meetings. There they have listened to the best efforts of successful men, have compared their own works and results with the authors of the papers and have silently promised themselves that better work in the future would be their daily endeavor.—*Iowa Medical Journal.*

STATE BOARD OF HEALTH OF WEST VIRGINIA.

Report of examination held at Charleston, July 8, 9, 10, 1912. Number of subjects examined 16; total number of questions, 170; percentage required to pass, 80; total number examined, 48; number passed, 37; number failed, 11.

The following applicants passed:

W. W. Orr, Chicago Col. of M. & S., Independence, W. Va.
H. S. Keister, Chicago Col. of M. & S., Chiefton, W. Va.
E. R. Cooper, Col. P. & S. (Balt.), Auburn, W. Va.
E. C. Bennett, Col. P. & S. (Balt.), Fayetteville, W. Va.
C. O. Post, Col. P. & S. (Balt.). Clarksburg, W. Va.
S. J. Morris, Col. P. & S. (Balt.), Morgantown, W. Va.
M. I. Mendeloff, Col. P. & S. (Balt.), Blakeley, W. Va.
A. W. Adkins, Col P. & S. (Balt.), Griffithsville, W. Va.
J. K. Guthrie, Col. P. & S. (Balt.), Romney, W. Va.
L. O. Schwartz, Col. P. & S. (Balt.), Tarentum, Pa.
J. H. Bannister, Col. P. & S. (Balt.), Fayetteville, W. Va.
P. C. Spangler, Col. P. & S. (Balt.), Thorp, W. Va.
J. S. Craig, Col. P. & S. (Balt.), Hookersville, W. Va.
G. B. Wheeler, Col. P. & S. (Balt.), McKendree, W. Va.
A. U. Tieche, Med. Col. Va., Mechanicsburg, Va.
H. C. Sarver, American Med. Col., Charleston, W. Va.
G. C. Webb, Md. Med. College, Vienna, Md.
C. M. Kimble, Md. Med. College, Paden City, W. Va.
H. H. Pettry, Md. Med. College, Lawson, W. Va.
S. E. Ballard, Balt. Med Col., Mishawa, Ind.
H. C. Camper, Balt. Med. Col., Welch, W. Va.
A. H. Grigg, Jefferson Med. Col., Pratt, W Va.
T. L. Harris, Jefferson Med. Col., Hedgesville, W. Va.
J. A. Bradley, Jefferson Med. Col., New Freeport, Pa.
E. C. Beam, Univ. Pittsburg, Pittsburg, Pa.
H. D. Hiveley, Univ. Louisville, Walton, W. Va.
W. D. Lewis, Univ. Louisville, Beckley, W. Va.
A. V. Weinberger, Univ. Louisville, Wheeling, W. Va.
T. E. Romine, Univ. Louisville, Cirtsville, W. Va.
W. L. Peck, Univ. Louisville, Riley, W. Va.
J. O. Hill, Univ. Louisville, Logan, W. Va.
K J. Heatherman, Univ. Louisville, Worth, W. Va.
L. W. Parker, Bennet Med. Col., Chicago, Ill.
J. M. Whittico, Meharry Med. Col., Kimball, W. Va.
G. L. Howard, Univ. of Md., Switchback, W. Va.
R. A. Ashworth, Univ. Col. Med., Anawalt, W Va.

T. A. Fletcher, Howard Univ., Washington, D. C.

Of those rejected by the Board four were from the P. & S. Col., Balt.; three from Univ. of Louisville; two from Marylard Med. and one each from the Med. Col. of Ill., and Electic Medical College.

Below are the examination questions, except the Eclectic for which we have not space:

CHEMISTRY AND MEDICAL JURISPRUDENCE.

1. Give a simple test for organic impurities in water. 2. What is the difference between urea and uric acid? 3. What chemical tests are most important in the analysis of urine? 4. Describe the tests for bile, blood, pus and urea in urine. 5. Give test for detection of morphine. 6. What is the effect of inhaling air rich with ozone on the respiratory organs? 7. What is the reaction of blood during gout? 8. In a medicolegal sense what constitutes a dying declaration and what is necessary to make it evidence in a court of justice, and how should it be taken? 9. At what period will a body float after being drowned? 10. What are symptoms of poisoning by wood alcohol and treatment fir same?

ANATOMY AND EMBRYOLOGY.

1. Give the anatomical divisions of the spinal column, and the bones in each division. 2. Name the bones of the middle ear and give their connections. 3. Describe the different kinds of joints, giving examples of each variety. 4. Describe the sartorius and the occipito-frontalis muscles. 5. Give the theoracic duct 7. Give origin, course and distribution of the sciatic nerve. 8. What bony cavities communicate with the nose? Describe the development of the frontal sinuses. 9. Give the early steps of development after impregnation. 10. Trace the foetal circulation.

SPECIAL MEDICINE.

1. Describe the physical signs and symptoms upon which you would base a diagnosis of aneurism of the thoracic aorta. 2. Diagnose renal calculus. Stone in the ureter. Pus kidney. 3. Define, diagnose and treat adenoid growths of the rasopharynx. 4. What is "hay fever?" Give the etiology and treatment. 5. Describe the technic of making intra-laryngeal applications. 6. Give the etiology, diagnose and treat edema of the larynx. 7. Give the etiology, diagnose and treat simple conjurctivitis, acute epidemic conjunctivitis, trachoma 8. Define, give the etiology, diagnose and treat iritis. 9. Describe the effect of lead poisoning on the nervous system. 10. Describe the technic of lumbar puncture.

OBSTETRICS AND GYNECOLOGY.

1. Give the symptoms of pregnancy in the first three months. 2. Give the indication for premature interruption of pregnancy. 3. Tell how you would manage a case of face presentation. 4. Give the causes and treatment of postpartum hemorrhage. 5. Give the prophylactic care of the breast before and after labor. 6. Give the symptoms and treatment of puerperal eclampsia. 7. Differentiate fibroid, ascites, fat and cysts. 8. Under what conditions would you advise a hysterectomy in cancer of the uterus? 9. What are some of the peculiarities of gonorrhea in a female? 10. How would you treat extreme prolapse?

SURGERY.

1. Discuss the principles underlying the local and general treatment of surgical infection. 2. Give the pathological and clinical difference between sarcoma and carcinoma. 3. Name three suture materials in common use, give a method for the sterilization of each and discuss the relative advantages and disadvantages of these materials. 4. Give the diagnosis of cerebral compression due to extradural hemorrhage. and differentiate it from compression due to depressed bone. Name the varieties of dislocation of the shoulder joint, and describe the symptoms of the most common one. 6. Give the etiology and diagnosis of empyema of the pleura. 7. Give the pathology and early diagnosis of intestinal obstruction. 8. Give the causes and diagnosis of rupture of the urinary bladder. 9. Give the diagnosis and treatment of a fracture in the lower half of the femur. 10. Give the pathology and treatment of ingrowing toenail.

PHYSIOLOGY AND HISTOLOGY.

1. Define afferent, efferent, trophic, inhibitory, and motor and vasomotor nerve fibers. 2. State the functions of the vas deferens, the vesiculae seminales and the prostate gland. 3. Define secretion, excretion and assimilation. 4. What digestive changes take place in the small intestine and the large intestine? 5. What is the physiologic function of the liver? 6. What changes are produced in the air and in the blood by respiration? 7. Give the histological structure of a tooth. 8. Describe a malpighian body. 9. Describe hyaline cartilage. 10. Describe the histological structure of a libule of the lung.

MATERIA MEDICA AND THERAPEUTICS.

1. Give rule for dosage of children. 2. Write a prescription containing four drugs. 3. What are somnifacients, Analgesics, Antipyretics? Give example and dose of each. 4. What are serums? Name three and give dose 5. Digitalis: Preparations, doses and physiological action.6. Coal tar derivatives: Name four principle ones and give physiological action. 7 Catharties: Name three varieties. Give therapy. 8. Strychnine: Give therapy. 9. X-Ray: Describe it and give therapeutic uses. 10. C06 Describe methods of use. Is it preferable to mercruy and iodides?

BACTERIOLOGY AND HYGIENE.

1. By what agencies does the body protect itself against the entrance and harmful effects of pathological bacteria? 2. What are some of the phenomena attending pus formation? 3. Describe the formation of an abscess. 4. State the most common sources of infection in diphtheria. 5. Name some diseases that are communicable to human through cow's milk. 6. How much fresh air is required for normal respiration during twenty-four hours? 7. What infectious disease may be due to impure drinking water? 8. Describe the agency of the ptomains in inducing diseases and the disorders produced by them. 9. Name six carbohydrates used as food. 10. What

are the principle measures which you would employ for the prevention of the spread of infectious diseases

PRACTICE OF MEDICINE AND PEDIATRICS.

1. Give the symptoms and treatment of chronic myocarditis. 2. Give the treatment of intestinal hemorrhage in typhoid fever. 3. Give the period of incubation and of eruption of the exanthemata. 4. What it uremia and how should it be treated? 5. Differentiate heat exhaustion from sunstroke. 6. What is the significance of the patella reflex as a sign of disease? 7. What are the indications of beginning hip-joint disease? What is the treatment? 8. Give the treatment of summer diarrhoea in infants. 9. What would you do in the case of a baby having convulsions about once or twice a week? 10. Give the symptoms and treatment of infantile scurvy.

Society Proceedings

THE CABELL COUNTY SOCIETY.

HUNTINGTON, W. VA., Sept. 13, 19VB.

Dear Doctor Jepson:

The regular monthly meeting of this society was held in the Hotel Frederick Thursday evening, September 12th.

The evening was spent in discussing clinical cases and the business side of the profession.

Fraternally yours,

JAMES R. BLISS, *Secretary.*

PRESTON COUNTY MEDICAL SOCIETY.

Tunnelton, W. Va., Sept. 21, 1912.

Editor West Virginia Medical Journal:

On August 30th, 1912, the Preston County Medical Society met in special session at Kingwood, and am proud to report an excellent attendance. Our meetings have been well attended this year, and nearly every doctor in the county is a member of our society. We all greatly regret the loss of one of our most active and enthusiastic members, Dr. Strickler, who has moved to Fairmont, where he has permanently located.

Before he left, Dr. Strickler gave us a farewell talk which was very interesting, and also very instructive and was greatly enjoyed by all.

I am enclosing herewith a paper which was read by Dr. Walker, of Tunnelton, at our last meting, and wish you would please have it published in an early issue of the State Journal.

Yours fraternally,

G. C. BLAKE, *Sec.-Treas.*

OHIO COUNTY SOCIETY.

The Ohio County Society held its first Autumn meeting on Monday evening, Sept. 16th, President Jepson in the chair. A paper by Dr. J. A. Campbell, on The Pathology of the Kidneys was read, and its discussion opened by Dr. Thornton, for whom Dr. Quimby exhibited on the screen a number of pictures of microscopic sections of diseased kidneys, to illustrate the different varieties of inflammation. Dr. Schwinn exhibited a tumor of the kidney which he had successfully removed from a man aged 65 years. Had sumptoms pointing to the abdomen for six years. Later indefinite pains referred to right side. No albumen, casts or epithelium in urine. The tumor was a sarcoma of left kidney, solid but with some cysts in it. The man, a laborer, has resumed his work. Dr. Fulton remarked that he had seen this patient, and he exhibited trifling symptoms in comparison with the pathological changes. The pain when he saw him was all in the iliac region. The value of repeated microscopical examination of 24 hour urine was impressed. Dr. Noome added some remarks.

An election of officers was then held, resulting as follows:

President, Dr. J. Schwinn; Vice President, Dr. J. T. Thornton; Secretary, Dr. J. E. Burns; Treasurer, Dr. R. M. Baird; Censors, Drs. L. D. Wilson, R. U. Drinkard and A. B. Barnet.

Adjourned.

September 23, the society met with President Schwinn in the chair. Thirty-three members present. After the reading of the minutes, the President delivered an address, in which were valuable suggestions as to the conduct of the society. (Will be published later). After some discussion of the points raised in the address, it was resolved that we adopt the post-graduate course of the Amrican Medical Association, beginning at a point to be indicated by the committee on program at the next meeting.

Adjourned.

UPSHUR COUNTY SOCIETY.

BUCKHANNON, W. VA., Oct. 2, 1912.

On September 26, Dr. C. O. Henry, President of the State Medical Association, made a visit to Buckhannon and presented to the Upshur County Medical Society its Charter. The doctors of Upshur were pleased to meet Dr. Henry and appreciated his timely remarks on that occasion.

They hope to have him again soon.

The Society is composed of the following members:

Dr. C. E. White, Buckhannon; Dr. F. F. Farnsworth, French Creek; Dr. D. M. Cutright, Buckhannon; Dr. S. C. Rusmissel, Buckhannon; Dr. R. H. McDonald, Frenchton; Dr. Oscar. B. Beer, Buckhannon; Dr. K. H. Trippett, Buckhannon; Dr. J. C. McCoy, Queens; Dr. R. A. Reger, Buckhannon, Dr. J. B. Simons, Buckhannon; Dr. R. G. Cutright, Rock Cave; Dr. W. H. Gum, Buckhannon; Dr. L. H. Forman, Buckhannon; Dr. J. M. King, Buckhannon. The above includes all the doctors in the county except Dr. J. J. Montgomery, Kedron.

Dr. G. O. Brown, Alexander; Dr. L. W. Page, Rock Cave; Dr. W. O. Grim, Buckhannon; Dr. Geo. Hamilton, Buckhannon.

The following officers were elected:

President, S. C. Rusmissel; Vice President, L. H. Forman; Secretary, Oscar B. Beer; Treasurer, C. E. White.

The following resolution was passed by the Society:

Believing that "the laborer is worthy of his hire," and that the physician is under no obligation to work for other people for nothing, and that he must conduct his business on business principles the same as any other business man that is successful, that he must charge a reasonable fee for his professional services and collect it, in order to discharge his own just obligations to his family and society as well as realize the highest degree of professional advancement, be it therefore

Resolved, by the Upshur County Medical Society: That a "Dead Beat" list be prepared containing all the names of persons who have failed to pay their bills for professional services or who have not made satisfactory arrangements to do so after a lapse of one year, provided that such delay has not been caused by misfortune. All such persons listed as above will be required to pay cash for any medical service rendered by the members of this society, unless in cases of emergency.

An effort will be made for better collections and higher fees. The Society has expressed itself against the pernicious practice of the County Court selling to the lowest bidder services rendered to the county poor.

We hope to enroll all the doctors in the county in a short while.

OSCAR B. BEER, *Secretary.*

AMERICAN PROCTOLOGIC SOCIETY.

Fourteenth annual meeting, held at Atlantic City, N. J., June 3 and 4, 1912.

The president, Dr. John L. Jelks, of Memphis, Tenn., in the chair. Officers elected for the ensuing year: President, Louis J. Hirschman, M.D. Detroit, Mich.; Vice-President, Alois B. Graham, M.D., Indianapolis, Ind.: Secretary-Treasurer. Lewis H. Adler, Jr., M.D., Philadelphia, Pa.: Executive Council, John L. Jelks, M. D., Memphis, Tenn., Louis J. Hirschman, M.D., Detroit, Mich., J. Rawson Pennington, M. D., Chicago, Ill., Lewis H. Adler, Jr., M.D., Philadelphia, Pa.

The place of meeting for 1913 will be at Minneapolis, Minn. Exact date and headquarters to be announced later.

The following were elected Associate Fellows of the Society: Dr. Rollon H. Barnes, Metropolitan Building, St. Louis, Mo.; Dr. Barney J. Dreyfuss, 7 W. 91st street, New York, N. Y.; Dr. James A. Duncan, 1107 Broadway, Toledo, O

The following is an abstract of the principal papers read:

PRESIDENT'S ADDRESS
RELATIONSHIP AND DUTIES OF "THE PROCTOLOGIST" TO THE PROFESSION

By JOHN L. JELKS, M.D., of Memphis, Tenn.

He stated that this Society was an innovation when organized, a strange vessel on the high seas. A child of American Medicine, it has now become a sprightly youth, with ambition and strength of purpose, having and exercising authority. The medical world recognizes as authoritative, the expressions of its fellows in the field covered. He admonished discretion, thorough description and perfection of technic. Hasty speech or carelessly written papers cannot be erased or changed—as in their publication they become permanent record. He referred to the theories of our science, which were born of dreamers and nurtured by enthusiasts, and fancies no silid superstructure could be reared on foundations so infirm, and added that neither these, nor the honor, distinction, nor the gain they held out, should be sufficient to determine the surgeon to make merchandise of theories. He called attention to the obstacles this Society had encountered, because of these fragile theories, which had previous to its existence, been set up as targets for those who were unfavorable to the development and progress of this specialty. He considered the true surgeon and specialist as humanitarians, whose purpose in life is to save life, restore health and happiness, and admonished him to shield and protect his brother from the darts aimed to destroy. He also referred to cancer in the rectum, sigmoid or colon, which may have been treated as of minor significance until metastases are so extensive as to preclude hope of a cure. He praised those Proctologists who have with much patience and fortitude labored for and finally overthrown that unfortunate assignment of malignant rectal and colonic cases to untimely graves. He stated that much harm has been done by the profession in the establishment of drug habits among the American people for the relief of constipation as last year's symposium before this Society would show ,and says the Proctologist is best equipped to study these cases, and arrive at the true etiology pointing to means of relief.

The American people are living in tin cans and cracker boxes, sparing time only to catch the next train, or meet the next market report, are storming their nervous systems with destructive toxins, filling sanatoria and health resorts with wrecks and lowering the scale of human usefulness and intelligence. None can more early observe the impending catastrophy, or turn on the searchlight than the Procto-Enterologist and scientist, who calls together the aids of chemistry, physiology, pathology and bacteriology and a fair degree of understanding as to the results of the methods and habits of life of the average American citizen, who is less careful in the selection of and preparation of his own food than that of his stock.

He complimented the Fellowship of the Society, which is limited to fifty and has forty-three members, and stated no similar number of men are banded together in the civilized world who can boast of greater attainments for the science of medicine, or for humanity, almost every member being the author, or an associate author of a book, and these are all standard text or reference books in this branch. Most of them also have been inventors of valuable instruments, or appliances applicable to this specialty. He referred to some of the research work done by the Fellows, and to the possibilities yet before them in Procto-Enterology.

He alluded to the intra and extra-rectal and anal and colonic affections, the roll they play and the possible developments of vaccine therapy and antitoxins in combating them. He stated that each Fellow should carefully weight his selected subject for these meetings, being mindful of the fact that the general profession is looking to this Society and its individual Fellows for facts, not fancies; for proven remedies and technics, and not fads.

The Society has attained an individuality, both national and international, and he reminded his Fellows that there is labor yet to perform. That they must retain their progressive spirit and enthusiasm, lest they lapse into a state of self-satisfaction when retrogression will mean their ending.

He referred to the fact that few of the hospitals of this country permit additions to their staff of specialists in Proctologic work, hence the general surgeon and the general practitioner are doing the work in these institutions, about as these same men would do the Ophthalmologic work, etc. He recommended the addition to the American Medical Association of a section, in which the subjects, Gastro-Enterology and Proctology, or Procto-Enterology may be discussed. He advised closer confinement of the Proctologists to this work, to the exclusion of general work, and believed this will receive from the profession greater respect for this specialty, and that fewer of this class will be referred to the general surgeon, or be accepted by him for treatment.

Conservative Life Insurance Companies are now convinced of the necessity of paying attention to the rectum and colon and such instances as the writer's confidential reports to alert examiners of cases of Amebic infection, Adenomata, Papillomata, Syphilitic and tuberculous diseases, which the examiner would have overlooked, and impressed him with this fact, and he wondered if these and similar instances had not brought to the minds of medical referees the possible advisability of subjecting all applicants for large policies to a plurality of examiners. He advised the change of name of this society to that of The American Procto-Enterologic Society, and stated not one of the Fellows of the Society had found he could eliminate from his work intra-abdominal intestinal work.

POST-OPERATIVE CARE OF RECTAL CASES.

By WM. M. BEACH, M.D., of Pittsburgh, Pa.

Success in the solution of proctologic problems is measured by the degree of perfection in the restoration of functional conditions involved; we must remove the disease, but it it quite as important that we have a care to vouchsafe to our patients perfect function.

Post-operative developments that need our attention are:

1. The disturbance of the nervous system.
2. The disturbance of the vascular system.
3. Digestive derangement.
4. Local conditions.

Post-operative neuroses manifest by (a) shock, (b) nervousness, (c) pain, (d) sphincteralgia, (e) retention of urine.

Vascular aberrations are shown by (a) hemorrhage, (b) infection.

Gastro-intestinal derangements are (a) nausea, (b) constipation, (c) ampullar impaction.

The local care of wounds should be inspected daily by the operator.

If patients are given proper post-operative care, their dread of radical cures would quickly subside, and rectal surgeons would escape untoward sequelae they may be compelled to record.

Reviews

LABORATORY METHODS, with Special Reference to the Needs of the General Practitioner. By B. G. R. WILLIAMS, M. D., assisted by E. G. C. WILLIAMS, M. D., with an introduction by VICTOR C. VAUGHAN, M.D., LL. D., 43 engravings.—St. Louis C. V. Mosby, Co.

The authors have been prompted to prepare this book, realizing that the general practitioner is not usually prepared to make elaborate chemical tests and examinations. We can recommend this little book as much for what it does not say as for what it does say. For example, it does not claim that the general practitioner with a few pieces of apparatus can do everything in the way of making tests and examining specimens in the laboratory. Many things are left for the expert who has all possible facilities for study. But on the other hand there are many things which if properly handled are very simple. It should be remembered that many of the great discoveries in science have been made by men with very small equipment in the way of apparatus. We are particularly pleased with the simplicity and at the same time efficiency of the apparatus recommended. A bacteriological laboratory not including a microscope can be bought for $5.00 or less, he says. Details ar given and illustrations (drawings) are used so that any one by this book and the expenditure of a small sum can fix up a good working laboratory in his consultation room. A recent graduate can make use of the training he has received in the medical college and in a few years be engaged in original research which may make him famous, as well as being able to help his own practice in solving problems which most general practitioners are obliged to refer to so-called higher authorities.

The title of a few of the chapters will give one a good idea of the book: The Sputum; Searching for germs; Chemistry and Biology of Gastric Juice; Detection of Common Poisons; Urine in Disease; Milk and its Home Modifications; Some Simple Water Analysis; Every Day Stool Tests; The Technique of the Private Post Mortem.

The book will be of value to the general practitioner even though he possess no microscope and have no fauilities for making other than the simple tests for urine. G. D. L.

SURGICAL CLINICS OF JOHN B. MURPHY, D. D.

VOLUME NO. I., NUMBER III AND IV.

THE SURGICAL CLINICS OF JOHN B. MURPHY, D. D., at Mercy Hospital, Chicago. Volume 1., number III. Octave of 174 pages, illustrated. Philadelphia and London. W. B. Saunders company, 1912. Published bi-monthly. Price per year, paper, $8.00. Cloth, $12.00.

Interest in the Murphy Clinics continues unabated. New things in surgical diagnosis and treatment are received first hand through this unique medium, and old things are dressed afresh, so that not a lecture in either number is commonplace, but every one is filled with valuable suggestion and information. In the third number, as in the preceding ones, much space is given to the consideration of bone and joint surgery; also here are found the author's views on goiter and its surgical treatment; also Cholelithiasis as well as a clear description with illustrations of Murphy's five original diagnostic methods. First, "fist percussion of the kidney;" second and third, "hammer stroke percussion" and "deep grip palpation," used in diagnosing gall bladder affections; fourth, "piano percussion," used in demonstrating the presence of slight amount of fluid or exudates in the abdominal cavity; fifth, the "comparative bimanual examination" of both iliac fossae at the same time, in diagnosing appendiceal conditions. These methods are made very plain in this number.

The fourth number contains fourteen lectures and an interesting "students' clinic." This gives a clear demonstration of Murphy's method as a teacher of surgical diagnosis. R. J. R.

INFANT FEEDING—By CLIFFORD G. GRULEE, A.M., M.D., *Assistant Professor of Pediatrics at Rush Medical College, Attending Pediatrician to Cook County Hospital.* Octavo of 295 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $3.00 net.

We welcome this new work on a subject upon which there has always been much difficulty and confusion and difference of opinion. It is divided into four parts—I., Fundamental Principles of Infants' Nutrition, under which the author notes some special points in the anatomy of the gastro-intestinal tract of the infant, with its physiology, and discusses absorption, metabolism and the bacteriology of the infantile intestine and stomach. II. treats of breast feeding and goes very thoroughly into every possible phase of the subject. III. artificial feeding, under which are considered all questions that arise in the management of the feeding of normal and abnormal infants. The latest German ideas are here presented, Finkelstein, Myer and others being freely consulted. Much very valuable information is here presented that in this country is thus far to be found only in journal literature. Part IV. deals with the premature infant, the nervous infant and nutrition in many conditions. The book can be commended heartily as the latest and best word on the subjects treated.

Medical Outlook

CITRIC ACID AND THE CITRATES, by HENRY BIXBY HEMENWAY, A.M., M.D., Evanston, Ill., in *J. A. M. A.*, April 6, 1912.

Hemenway shows that viscosity of the blood is quite different from coagulation, although both may exist at the same time. In thrombotic appoplexy, the coagulum is favored by the retarded current due to increased viscosity. Edema of the pharynx and other edemas which may threaten life are greatly favored by increased viscarity of the blood. Viscosity is due to the colloid of the blood current will be reduced unless the force of the heart behind is greatly increased. Anything which stimulates the heart to increased action is, of course, hard on the valves and muscular walls of the heart itself as well as on the blood vessels. It is more scientific and sensible to lower the viscosity of the blood, thus permitting the ordinary forces of circulation to act. The agent most efficient for this purpose is citric acid and the citrates. Lemonade, citric fruits and the citrates have long been used empirically with excellent results. Sometimes the basic element of the citrates has been given the credit, but it is shown by chemical experiments that the results are due to the acid element which acts on the colloid constituents, thus thinning the blood, or in other words reduces its viscosity. Texts on Therapeutics make no mention of this property of the citrates.

THE NEW PUBLIC HEALTH—H. W. HILL, M.D., of the Minn, State Board of Health, has a series of articles in the *Journal-Lancet* on this subject. We quote from summary of the fifth paper:

The measured purpose for the abolition of infectious diseases are:

1. The securing of each individual citizen continuously of his highest possible general physical health.

2. The securing to each individual citizen of instruction and training in the personal conduct which he must follow in order to avoid receiving into his body the discharges of infected persons

3. The securing to each individual of continuous specific immunization.

4. The physical supervision of the four great public routes of infection (public water supplies, public food supplies, flies, which are public property, and puble milk supplies)to exclude all discharges from them.

5. The physical supervision of all *known infectious cases* to exclude their infected discharges from all routes.

6. The sociological supervision of all infectious persons.

The first three measures, education, demonstration, persuation, are the things required; but also the abolition of poverty, carelessness, and the pressure of necessity, knowledge alone is not enough. Time and facilities to do with are needed also.

For the second three we have principles and practice, precedent, authority, some laws, and the

hearty support of public opinion in epidemics. We need a few new laws, chiefly we need proper organization and increased equipment, but more than all, the hearty support of public opinion, continuously, not in epidemics only.—G. D. L.

PREVENTION OF EPILEPSY—M. L. PERRY, M.D., Parsons, Kas., in *Jour. Missouri State Med. Asso.*

Epilepsy is one of the most serious and intractable of diseases. About one out of 150 of the population of U. S. is an epileptic, and the number is increasing. When well established, difficult to cure, a considerable number absolutely hopeless from beginning. Most cases are hereditary, that is, a poorly balanced nervous system is propagated. "So long as criminals, degener- disposing cause. Alcoholism and vicious habits play an important part in producing the nervous unbalance. A surprisingly large number who are more or less affected marry and thus the disease is propagated. "So long as criminals degenerates, epileptics, imbeciles and confirmed drunkards are allowed to marry and procreate offspring we can expect nothing else than an even increasing number of neurotics, part of whom will develop epilepsy." Sterilization will not be very effective, because the types coming under the laws which a few states have adopted, are the ones from which we may reasonably expect the least danger, as they are already segregated more or less permanently in institutions. More rigid marriage restrictions would do much toward checking the number of epileptics and neurotics which would produce epilepsy in the fuutre.

The care and management of nervous children plays an important part in prevention. Bottle fed babies are more apt to turn out nervous wrecks. Reflex convulsions from intestinal and gastric causes are a source of after epileptic conditions. Quotes Jacobi as saying: "Every convulsion, ever so slight or short, may produce cerebral hemorrhage with all its possible results —epilepsy, idiocy, paralysis and insanity." Too violently playing on emotions especially in female children is dangerous. Teachers should realize this danger and exercise care in in punishing children. Surgical interferance in head injuries has an important place in preventing epilepsy, as many cases can be traced to traumatic origin.

Permanent and enforced segregation of defectives, delinquents and neurotics is recommended.

G. D. L.

TREATMENT FOR PRURITUS UNIVERSALIS.

The *Journal de medecine de Paris* for October 30, 1909, quotes Pautrier as the author of the following ointment for use in the treatment of general pruritus:

Hydrocyanic acid ..... ʒi
Menthol ..... gr. xv
Zinc oxide ..... ʒv
Cold cream ..... ℥iiss

Mix and make ointment.
Sig.: For external use.

Or inunctions may be made with a salve of the following composition:

℞ Chloral hydrate ..... gr. xv
Camphorated oil ..... ʒiiss
Wool fat ..... ℥iii
Mix and make ointment.
Sig.: For external use.

SUTURE OF THE HEART.

Dr. E. Ranzi, in Wiener klin. Woch., Vienna, says that since Rehn published in 1896 the first successful case of suture of the heart 223 cases of operative treatment have been recorded, with a mortality of 53.3 per cent. To this number Ranzi adds three cases of a stab wound and three of a firearm wound of the heart, with operative treatment at von Eiselsberg's clinic at Vienna, but only one of the patients survived. The others were practically moribund when operated on. In two cases the operation was deferred for several hours as the anemia did not seem threatening, but the outcome showed that it might have been better in these cases to have operated at once. In the one successful case five hours had elapsed before the operation, but the anemia was not very intense. In some of the cases on record the heart action had been entirely arrested by the accumulated blood, but the heart recuperated and started to beat again as soon as the blood was removed. This did not happen in the one case of this kind in Ranzi's experience.—*Journal New Jersey Medical Society.*

METHYLINE-BLUE IN PIN WORMS.

Treatment with methylene-blue pills extending over five days, 18 to 24 one-grain pills daily (for a full grown, otherwise healthy man), the entire treatment to be taken three times, ten days apart, has destroyed these pests in my alimentary canal on three different occasions.

A slight headache and pronounced tinnitus aurium, similar to the effect of large doses of quinine, became noticeable on the second day. On the last day a marked laxative effect produced liberal evacuation of the bowel. Urine and feces remained dark blue. Sedimentation and microscopic examination of the urine failed to show anything but a few cuboidal renal cells, some cells from the epithelium of the bladder and numerous calcium oxalate crystals. The feces were stained dark blue, even the mucus appeared blue. Careful search failed to show oxyuris in the feces, or ova or larvae from the vicinity of the anus.

After three months no parasites have reappeared and I can say that a most stubborn case of pin worms infection has been cured by a simple, safe and very practical treatment. Methylene-blue pills have removed these annoying pests from my intestine on four different occasions and have given permanent relief from the same annoyance to three other persons.—Bulletin of Manila Medical Society.

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Original Articles

SOME MODERN FACTORS OF SAFETY IN SURGICAL OPERATIONS.

By J. Shelton Horsley, M.D.,
Richmond, Va.

(Read at annual meeting of West Virginia State Medical Association, July, 1912.)

The period in surgery which covers the introduction of anesthesia and the general adoption of the teachings of Lister was so revolutionary that we are inclined to ignore by comparison the improvements that have been more recently introduced. It is the purpose of this paper to call attention briefly to some of the factors adopted in the last few years which tend to lessen both the mortality and morbidity from surgical operations.

In the performance of a surgical operation the anesthesia is always one of the chief considerations. No anesthetic so far has been entirely satisfactory in all cases. Ether is unquestionably safer than chloroform, yet the nausea that generally follows its administration, together with its irritation of the various eliminative organs, makes it far from an ideal anesthetic. So far as immediate danger is concerned, ether cannot be considered absolutely safe, though it approximates this in the hands of a careful anesthetist. The class of cases in which ether is most objectionable is where the patients are desperately sick from infection. The mere administration of ether lowers the hemoglobin about 10% in many cases, and when a patient suffering from sepsis and already toxic and anemic has to carry the additional burden of a destruction of the hemoglobin by the ether—to say nothing of its irritating effects upon the kidneys and stomach—the balance is often turned against the patient and death may be due more to the effects of the anesthetic than to the operation itself. Crile has popularized the giving of nitrous oxide and oxygen in combination. This is not followed by the irritating effects of ether and has many advantages. The great disadvantage is that it requires a complicated apparatus and a skilled anesthetist and even then complete relaxation, which is desirable in abdominal cases, is not always obtained.

Probably the greatest of the many great things that Crile has done is his calling attention to what he terms the *anoci association*. Impulses along the nerves which tend to cause shock are blocked by the injection of novocaine in the tissues to be operated upon, even under a general anesthetic. The harmful effects of fright and apprehension are minimized by the administration of morphine and scopolomin before the operation, and by the personal attention of the operator and his associates in inspiring confidence and bolstering up the courage of the patient. Crile has demonstrated that there is a real pathology to shock, fright and profound nervous impulses. He has found that the cortical cells of the brain may be over-stimulated by shock, fright, toxic conditions, or affected by malnutrition

that they can never regenerate. Profound loss of blood or long continued anemia may produce the same results. In this way we can account for numerous cases of shock or fright or great hemorrhage in which the patient apparently recovers, but is nervous, lacks concentration or shows some mental effect which heretofore we have not been able to account for, but which we now know is due to the degeneration of the cortical cells either from over-stimulation or from lack of nutrition. We can profit by these investigations not only in lessening the number of deaths that have been formerly attributed to shock and loss of blood, but in lessening the morbidity of these patients after recovery.

The treatment of infection is another modern factor of safety that has been made much more efficient in recent years. We were formerly so taken up with the destruction of germs that we neglected the natural defenses of the body. Fighting an infection is very much like conducting a warfare. We must not only attempt an offensive campaign, but we must build up the reserve force so that if the enemy does break by, the home guard will be properly organized for defense. It has been demonstrated time and again that it is utterly impossible to disinfect the normal skin. Certain staphylococcic pus-forming germs normally inhabit the skin, but under normal conditions the tissues in their neighborhood can hold them in check. But if in our eagerness to destroy all germs we lose sight of this fact and apply antiseptics so vigorously as to destroy not only germs, but many of the epidermal cells, we break down this natural immunity and leave what is practically a culture medium for the few germs that have escaped the antiseptic. We now find that cleanliness is the chief thing; that prolonged preliminary preparations, prolonged anesthetic, roughness in handling the tissues (whether the patient is under an anesthetic or not), bruising and rough sponging, serve to weaken the resistance of the patient and thereby increase the liability to infection. Too often obvious sources of infection are neglected while emphasis is laid on some unimportant feature. It is rather the usual thing these days to blame infection upon catgut without taking the trouble to discover other sources. We have swung away from the first teachings of air infection by Lister to such an extent that this source is frequently neglected. The modern methods of sterilizing catgut, particularly with the use of iodine, make it just as safe from the aseptic standpoint as any other ligature. Too often operating rooms are located on the bottom floor of the hospital, or are situated in such a manner that draughts may blow in dust from the wards, which is naturally the most septic of materials. A Petri dish left exposed on the instrument table during an ordinary operation if covered and incubated afterwards will serve as a reliable check upon the amount of infection from dust. Only too frequently do we find many colonies developing containing pyogenic germs. It is natural to suppose that if these germs drop into the dish from the air during the performance of the operation they also dropped into the open wound. Operating rooms to avoid this source of contamination should be isolated as much as possible from the rest of the hospital, should be on the top floor, and should be cleaned frequently not only with water but with vacuum cleaners. In cases in which particular care is to be used it is well to spray the floor and the walls of the operating room a short while before the operation is begun.

The personal technic has, of course, a great deal to do with success aside from the standpoint of asepsis. On the one hand the surgeon who operates for time and who conceives that the chief object of an operation is to complete it in the fewest number of minutes, may occasionally achieve brilliant results, but will frequently leave behind incomplete work which will require further operations later on, or will find deaths from post-operative hemorrhage, or slipped ligatures creeping into his mortality rates. On the other hand, the man who is slow on all occasions and who always insists upon taking his time even in desperate cases, will often destroy the resistance of a pa-

tient who might otherwise have been saved. The happy medium between these two extremes is the ideal.

Perhaps the most striking factor of safety that has been introduced within recent years is the suturing of blood vessels and transfusion of blood. Not infrequently it happens that a malignant growth is deemed inoperable because it impinges upon some large vessel or a wound in a large artery is secured by ligating the vessel, with the consequent possibility of gangrene of a limb. A knowledge of the technic of suturing blood vessels, with some experimental work to perfect the technic, would often enable the operator to handle these cases successfully by suturing the wounded vessel or removing a portion of it and uniting the ends. These situations occasionally arise and it is the duty of every operator to so perfect himself in the advancements of surgery that, no matter what occurs, the patient can be given the benefit of every modern procedure. While a practical knowledge of arterial suturing is a necessity in treating wounded vessels, transfusion of blood may be done with various forms of canulae. In my own judgment, though, transfusion can be accomplished more satisfactorily by suturing than by any of the various appliances. It seems that blood vessel suturing is going through the same stages of evolution as intestinal surgery underwent. At first there were all kinds of bobbins, buttons and forceps for handling a divided intestine. Later experience showed that a needle and thread was more satisfactory if properly used.

Every surgeon sees cases of hemorrhage where the ordinary methods are of no avail. A patient who has had a profound hemorrhage after childbirth, or as result of an injury, or who has become exceedingly anemic from long continued hemorrhage, always presents a grave problem. In the acute cases the injection of salt solution, lowering the head of the bed and bandaging the extremities may tide over the crisis, but there are some patients who have lost so much blood and their hemoglobin has sunk to such a point that oxidization of the tissues cannot be properly carried on. When this point has been reached salt solution will not do and the patient necessarily dies unless the corpuscular elements of the blood be introduced. This can only be done by transfusion from another individual. I have performed this operation in cases of pellagra, sepsis and acute anemia from various causes. In no instance did it do harm, and though it did not save most of the patients, I am positive that there are several patients in the list whose lives have been saved by this procedure. The surgeon who has this technic at his command is in a position to give patients who have lost large quantities of blood an excellent opportunity for recovery, when under other treatment they would have but little chance.

To simplify the technic of transfusion of blood and suturing blood vessels I have employed a method which does away with some of the objectionable features of the technic as ordinarily adopted. An instrument called an "arterial suture staff" is used. It consists of a small steel shaft six inches long and about 1/16 of an inch in diameter. This curves at one extremity into a shorter staff 1¾ inches long. The curved portion is flattened out so as to form a light spring. Buttons are placed at the extremity of the short shaft and opposite this point on the main shaft and low down and as close as possible to the spring. These buttons hug the shaft closely, so that when the sutures are wrapped around the buttons twice the thread is held firmly. The vessel is exposed, cleaned with salt solution and three sutures consisting of very fine silk in a No. 16 straight needle are placed at equal distances around the circumference. In the case of transfusion this unites the artery to the vein. The suture is passed from without the vessel inward on one side and from within outwards on the other, so that the intima is approximated. As these sutures are placed they are fastened to the buttons on the suture staff. The lowest one is placed first and fastened to the button near the spring, and the ends are cut short. The short end of the next is fastened to an upper

button on the main shaft and the threaded end is left long for suturing. The third suture is then passed and fastened to the button on the short shaft, while the shaft is slightly compressed towards the main shaft. When the compression is released the spring makes equal tension on all of these guy sutures and converts the circular circumference into a triangle and at the same time everts the intima. The suturing is done with the threaded end of the second suture, the needle being passed back and forth after the manner of a continuous mattress stitch. The details of this method are given in a paper read before the surgical section of the American Medical Association at Atlantic City on June 3-5, 1912 (*Journal American Medical Association,* July 6, 1912).

Not only does transfusion save the lives of patients after a sudden post-operative hemorrhage or acute anemia from any cause when other methods would not avail, but it may also lessen morbidity in the patient who would otherwise recover, as it will keep up the nutrition to the cortical cerebral cells and prevent the degeneration of many of them which might otherwise occur.

SUGGESTIONS TO A MEDICAL SOCIETY.

By J. Schwinn, M.D., Wheeling, W. Va.

(*President's Address delivered to Ohio County Medical Society, Sept. 23, 1912.*)

[The lessons of this address are applicable to all medical societies; hence we are glad to give it a place in the Journal, and ask for it a careful reading and consideration.—EDITOR.]

In electing me to the exalted position of your presiding officer you have bestowed upon me an honor I am scarcely worthy of, but for which I am most grateful. I am well aware of the difficulties and obstacles before me, and know that only with the hearty co-operation of every member will it be possible so to conduct the affairs of your society that at the expiration of my term we may all be able to say, "We have done our best."

It has been the custom for many years to offer, in the president's address, some suggestions looking towards the welfare of the society and its members, and while I have nothing especially new to present, I trust that what little I have to say may not fall on ears altogether deaf to these suggestions. The main object of a society like ours should be the fortifying of each individual member for his or her arduous task of preventing and curing disease and the fostering of a friendly and uplifting spirit among its members.

When the young graduate leaves his alma mater he scarcely realizes that his diploma simply certifies to the fact that he has mastered the A, B, C of his noble profession and no more, and that he is steering his ship out upon an ocean of waves and ripples and ruffles and winds, where difficulties and failures and disaster lurk on every side.

Marion Sims lost his first two cases and threw his diploma down into a well, discouraged and disgusted, and we all, old and young, have felt many times like doing the same. Why? Because it is only human and natural that in realizing our impotency in the face of grave conditions we should lack that courage which only springs from the unbounded confidence in our own powers and possibilities.

The fact stands out boldly that in order to become an efficient member of our clan one must start a post-graduate course the moment he receives his diploma and must keep up this course to the minute he is ready to lay down his burden. A forty or fifty-year post-graduate course is the only thing that will save you from becoming a medical fossil. No Osler limit for the progressive physician, and it does one good to see some men in our ranks who have reached three-score and ten and are still in the lead, instilling the younger members with their truly beautiful enthusiasm.

This post-graduate course, then, must enable every member of our great profession to acquire knowledge and gather in experience throughout our lives and from all available sources, and these are many and varied. To begin with, all one needs is a quiet sanctum, a good text-book, a patient and a mind bent on hard work. These ought to be the tools of the beginner, and when well used will yield a rich harvest. One case thoroughly gone over and digested is worth more than a

score of superficially studied and badly managed ones, and the younger physician must always bear in mind that his colleagues are measuring his efficiency and success not by the number of patients or well people crowding his office, not by the number of visits he marks down, not by the frequency with which his name is found in the morning paper, not by the plethoric condition of his bank account, but by the thoroughness and care exhibited in his work, by the earnestness of his purpose, by the loftiness of his ideals, and by the just and gentle treatment of his brother physicians; and, believe me, I would rather claim the respect of my professional brethren than be paraded as the hero of a fickle laity or even of a whole community. . .

To the young graduate I would strongly recommend the taking of notes in all cases. It is astonishing how many questions will present themselves, how many points will have to be looked up, how much more carefully an examination will be conducted, when one is in the habit of taking notes. Besides, these notes will always be at your command for future reference for comparing the status of a patient at different times, and last but not least, a paper based on one's own careful observations is worth a volume of compilations.

The next and, to my mind, the greatest opportunity for real, practical post-graduate work is at the meetings of a well conducted medical society, a society composed of earnest, enthusiastic, truth-seeking, hard-working physicians; not the kind that sees the main object of a society in the mutual admiration of its members, not the kind that sits in blissful oblivion during the reading of a paper and after the meeting shakes hands with the essayist, telling him a few nice things privately; not the kind that has to be dragged to the meeting, not the kind that is so over-bearingly wise that one cannot teach him anything, but a body of men bent on hard work for the ultimate benefit of their fellow beings, regarding their professional efficiency and integrity among their greatest assets in life.

Here, then, is the place for comparing notes, here is the place for [illegible]ling, reforming and changing your views on the most important topics of your science and art; here it is that text-book knowledge must accommodate itself to the stern facts gathered at the bed-side by your own accurate observation, and nowhere will you be able to gather more precious gems than from a well conducted discussion of facts by earnest, experienced, observing men, and it behooves, therefore, every member of this society to contribute his or her full share towards making its meetings most profitable and interesting.

I would suggest that the writing of papers should be entrusted to the younger members, while the discussions should be in the hands of those who, through long years of toil, have become more adept in the sifting of the grain from the chaff and straw. The papers should be well prepared, short, to the point, full of meat, avoiding all platitudes, and wherever feasible should be spiced with the report of some well studied cases in the writer's own practice. Generally speaking, I believe the meetings would be both more profitable and interesting if the clinical character would prevail over the scientific. Patients should be presented and their cases carefully studied; the diagnostic difficulties should be pointed out, newer methods of physical examination should be demonstrated, etc.

Again, the surgeons are doing an injustice to themselves and to their colleagues on the medical side by not carefully studying their specimens, bringing them to the meetings and giving short talks on the circumstances under which they were removed. Such specimens, well studied and well presented, would enlighten the internist on many obscure abdominal and other conditions so well understood by the surgeon and so little appreciated by the internist, simply because he has not the advantage of studying pathology in the living. It becomes more and more a matter of great importance to the surgeon to recognize the different normal and abnormal tissues macroscopically during the course of an operation, and this knowledge can only come from long and

careful microscopic and macroscopic examinations of such tissues. For instance, every surgeon knows the importance of recognizing cancerous tissue in the breast or in the uterine scrapings during the progress of an operation on these organs, and should not let any opportunity pass by in order to increase his stock of knowledge on these things.

X-ray examinations are playing an important role in the diagnosis and treatment of many obscure conditions, and I would urge those engaged in this sort of work to bring their pictures along and give short talks from time to time on the progress in this field. I shall only remind you of the mental picture we used to have of some of our reduced fractures and the actual conditions revealed by the X-ray, and the importance of a knowledge of this work becomes evident. Likewise I think that an evening spent with a lucid screen demonstration of microscopical slides, touching on such subjects as the different forms of carcinoma or uterine scrapings, or differential diagnosis of tumors, etc., would be an evening well and profitably spent, for although the busy man is unable to follow this work, he should have at least a speaking acquaintance with it.

Laboratory methods enter very materially into diagnosis and therapeutics, and if one of our laboratory experts would give a good *ad oculos* demonstration of the newer and more important tests in gastrology, urology, etc., I am quite sure he would enlist the attention of the majority of our members. We must not forget our other specialists. Eye, ear, nose and throat diseases enter so frequently and intimately into our daily professional life that it is of great importance to be able to sift one's cases and know just how much of the specialists' work we can assume without harming our patients. I am quite certain that many an ear or eye would be much better off today if it had been treated by a specialist instead of by a general practitioner or an all-around surgeon, and an occasional paper from our friend, the specialist, is therefore quite in order.

Some five years ago the American Medical Association inaugurated a four-year post-graduate course and invited the different societies to avail themselves of the opportunity thereby presented.

Our society, I believe, was one of the first to take up this work, and for a year or more adhered to the plan with most gratifying results. Our meetings were well attended, the lecturers did themselves credit without exception, the enthusiasm was genuine and lasting. Why this course was dropped in after years I do not know, but have always regretted it, for here we had a thoroughly systematic, practical course, where each lecturer knew his task, had ample time to prepare himself, and as a rule without fail gave a most accurate and carefully prepared expose of the subject assigned to him. I am in hopes that the society sooner or later may see fit to resume this course.

And now it becomes my painful duty to touch upon a matter most delicate, most difficult to handle and yet of the utmost importance to the welfare of our society. The dignity of our society depends on the integrity of its members. One rotten stone in the wall endangers the whole building. It is an open secret that throughout the land, and not less among members of our own society, a form of advertising for patients is going on, most degrading, unjust to others and unworthy of a self-respecting physician.

The most honest advertiser is the quack, who openly and unblushingly parades his photograph and his many accomplishments in the daily press. From the quack down to the real nice, strictly ethical doctor, who has himself called out in church or in the hotel lobby or from some social gathering, we find an endless variety of advertising schemes. Some are modest, others more unblushing, and in one instance I am told that paid agents are sent out through the country districts in order to induce the country doctor to direct his patients in certain directions, so that in certain quarters the practice of medicine seems to have degenerated into a mere traffic in human life.

Intimately connected with these advertising schemes is the custom, more or less

prevalent, of fee-splitting. During the past decade there has been a decided change brought about in the relation between surgeon and internist, in so far as the surgeon has taken over many conditions formerly treated by the internist. I need only mention the present treatment of gallstones, appendicitis, many gastro-intestinal conditions, etc., which are now at one stage or the other treated by the surgeon.

In this way the internist has his income considerably diminished, and often even loses the patronage of a whole family. Again a physician often brings his patient to the surgeon from a distance, losing valuable time and incurring actual expenses, and it seems, therefore, only just and proper that he should be compensated in some way for his sacrifices. Often the patient is unwilling to compensate him for his trouble, and I fail to see any wrong in the action of the surgeon who pays a man for his loss of time and actual expenses, provided it is not done with the intention of inducing him to send his cases to just that surgeon. How to adjust this matter I don't know, for I am quite convinced that just through this practice of fee-splitting the dignity of the profession has suffered more than from anything else. The average physician or surgeon often has to take a back seat while his more aggressive and less scrupulous neighbor walks right over him. The final settlement of these questions in my judgment will depend on the sense of honor and justice of each individual member of the profession. And now let us get busy. Let each member put his best efforts into this winter's work and let us be prompt and punctual at the meetings. Throw away your little bickerings and jealousies, be one great family of hard workers, be men and make the Ohio County Medical Society what it is destined to be—a leader among leaders.

(Since the above address touches the much discussed question of fee-splitting, the following suggestion of a remedy by Dr. Bristow, editor of the *New York State Journal of Medicine,* may be of interest.—EDITOR.)

"A struggling practitioner is called to see a case of abdominal pain. He makes two or three visits, decides that the case is one of appendicitis, calls a surgeon who confirms the diagnosis and advises operation. The patient is removed to the hospital, for the time being passes out of the sphere of influence of the family practitioner, ceases for that time to be a source of income to him, which is in fact transferred to the surgeon. Let us estimate the income of this particular doctor at $2,000 a year, which is twice the estimate of the average physician's income. The surgeon for his services receives an average fee of $150, 7½ per cent. of the entire annual income of the physician who has surrendered the case. The least that can be said of such a situation is that it is full of temptation for the poor doctor and the ambitious surgeon. Is there any remedy? I do not know, but with the greatest diffidence and the knowledge that I may be misjudged and misunderstood I offer the following: First, that the county society recognize the inequality of such transactions and the substantial injustice to the general practitioner who is not adequately paid for his responsibility in recommending operation in conjunction with the surgeon. Second, that the county society in consideration of all the facts set forth in this paper, say that it shall be allowable and proper for the physician and surgeon to render a joint bill to the patient in which the family practitioner shall be recognized as he never has heretofore except on the sly and by a secret agreement, in itself always a bad thing. What compensation shall go to the physician and what to the surgeon I leave for discussion. It is not an easy matter to determine, but I offer the suggestion tentatively and mainly for the purpose of eliciting discussion. It seems to me to be practicable and in so far as the transaction is *known* to the patient, also honorable.

Of course I see that it is quite possible for such a course to result in surgeons bidding against each other for the job, but that is what is actually done in secret today, and it seems to me to be better and fairer for the profession to come out openly and acknowledge that an injustice has been done the family practitioner in the past, and try to find an honorable method of remedying the injustice, than to continue the present secret methods. For my part I have faith in the sense of justice of the family practitioner, and I do not believe that if the course suggested were adopted the doctors would try to drive the specialists to the wall. There are as fair-minded men in medicine as in any of the learned professions, and in the long run right would prevail and the trickster and the man who was willing to practice unfairly and secretly to the detriment of his neighbor would find himself shortly in disrepute."

Cancer of the posterior part of the tongue invades the lymphatics not only on the side upon which the disease is located, but also upon the opposite side, because of the peculiar anatomy of the lymphatics of this region.—*American Journal of Surgery.*

THE MANAGEMENT OF CASES OF OPHTHALMIA NEONATORUM.

By Hunter McGuire, M.D., Winchester, Va.

(Read at meeting of Eastern Panhandle Medical Association, July 3, 1912.)

So much has been written on this subject and so comprehensibly is it taught in our medical schools by both obstetricians and ophthalmologists that I have felt some hesitancy in presenting it for your consideration.

When we realize, however, the dreaded consequences of this disease and the fact that a large percentage of the inmates of our blind institutions have been the victims of its ravages and have been doomed to a life of darkness either because of neglect or injudicious management, it is of the utmost importance that we should recognize the trouble in the early stages and be prepared to intelligently treat it when it comes under our observation. For obvious reasons it is impracticable in the great majority of cases, except when they occur in the cities or towns, to refer them to the ophthalmologist, so preventive or curative measures must be instituted and carried out by the family physician, and he is the one on whom the responsibility rests.

In order to clearly comprehend the indications for certain lines of treatment it is necessary that we should be perfectly familiar, not only with the clinical symptoms of ophthalmia, but with the pathological changes in the lids and the eyeball. We must remember at the outset that this is the most virulent of all eye infections with which we have to deal and that the destructive changes incident to this infection, unless checked in the early stages of the disease, must inevitably lead to loss of sight.

As is well known, the infection takes place during the passage of the child's head through the vaginal canal, the exciting agent being the gonococcus of Neisser. The conjunctival sac appears to furnish a particularly fertile soil for the development of this microbe, and its action here is even more intense than in either the urethra or the vagina. Some few cases of well advanced ophthalmia at the time of birth, so-called antepartum ophthalmia, have been reported, the infection having occurred *in utero*, some observers being of the opinion that the germ is capable of penetrating the foetal membranes, but of course these cases are exceedingly rare. It would be interesting to discuss the various theories advanced as to the method of infection in antepartum ophthalmia, but time will not permit me to consider this phase of the subject and it would be of no practical value in the management of these cases. Mention, however, should be made of the fact that non-gonorrhoeal purulent conjunctivitis with clinical symptoms identical with those of ophthalmia neonatorum does occur in certain rare instances, the infection having been proven to be due to other bacteria. So impressed is he with the fact that these cases occur more frequently than we suspect that Myles Standish of Boston insists that in all cases of purulent ophthalmia the diagnosis should be based upon the bacteriologic findings rather than the clinical symptoms.

The symptoms of purulent ophthalmia almost invariably show themselves during the first three days after birth. If it occurs at a later period the infection is probably not gonorrhoeal, but comes from soiled fingers, towels, cloths or sponges. One eye is usually affected before the other, a day or two generally intervening. If preventive measures, however, are instituted early enough infection of the second eye may be averted.

The first noticeable symptom is an infiltration of the lids and of the palpebral and ocular conjunctiva. The skin of the lid becomes tense, hard and of a dusky red color, and during this stage because of the swelling and chemosis it is almost impossible to evert the lids. The conjunctiva becomes swollen and congested and presents a velvety appearance. This intense chemosis not only affects the conjunctiva of the lid, but extends over the eyeball and surrounds the cornea in a circular ridge to the height of several millimeters. The cornea appears to the eye of the observer to form the floor of a

deep depression and its nutrition is interfered with by reason of the pressure exerted by the oedematous tissues. These symptoms are soon followed by a discharge at first of a mucoid character and frequently tinged with blood and later, as the swelling subsides, becoming thick, creamy and distinctly purulent. In severe cases the discharge accumulates at very frequent intervals and flows through the palpebral fissure almost constantly. As the disease advances the cornea, from loss of nutrition and being constantly bathed in virulent pus, begins to lose its transparency, becomes cloudy and infiltrated areas appear in its substance. If the disease is not checked, these soon break down and ulceration results. The ulcers may extend laterally and coalesce or may penetrate deeply into the corneal substance and perforate, allowing the aqueous to gush out and the iris to become agglutinated to the posterior corneal surface, eventually forming an anterior synechia. On the other hand the whole cornea may become opaque and bulge forward from the increased intraocular pressure and constitute an anterior staphyloma. In severer cases the deeper structures of the eye may be invaded with pyogenic microbes and panophthalmitis result. I have detailed these symptoms somewhat hurriedly, not with the idea of presenting anything new, but with the hope of emphasizing the importance of certain lines of treatment which are indicated in well defined cases. So exhaustive has been the literature concerning the treatment of ophthalmia in the new born and so numerous have been the remedies suggested that it is hardly possible in a brief paper to thoroughly discuss the various plans of management advocated by different authors. It is my desire to bring before you just as practically as I can the methods which have afforded me the best results and the reasons for adopting these methods. Before taking up in detail the management of these cases a word or two should be said concerning the prophylactic treatment.

We are all thoroughly familiar with the method of Crede, which consists in the instillation of one drop of a 2% solution of nitrate of silver in the child's eyes immediately after birth. This method has been almost universally adopted in all lying in hospitals, and so efficacious has it proved that the percentage of these cases has been reduced from 10% to 0.2%. Some obstetricians advocate the use of weaker solutions of silver on the ground that they are less irritating and equally as efficient. I am free to confess that I have never been able to concur in this view. While it is perfectly true that a 2% solution of nitrate of silver is somewhat more irritating than the weaker solutions, it can be definitely asserted that its bactericidal property is doubly as great and that the irritative action incident to its use has never been known to produce deleterious changes in the ocular tissues.

A very prolonged action or a too frequent use of any solution of nitrate of silver, whether it be a one or two per cent., might cause argyrosis or perhaps some destructive changes in the corneal epithelium, but it must be remembered that the neutralizing effect of the tears is very great, and in addition to this most surgeons limit the action of the silver with saline solution, after allowing the former to remain in contact with the eye for a given period. Furthermore, it is a significant fact that the eyes of infants possess to a greater degree the power of resistance to the action of silver than those of adults, and while one drop of a two per cent. solution of silver will frequently cause an intense inflammatory reaction in an adult's eye, with symptoms of so-called silver catarrh, the infant's eye will show comparatively little reaction from the same strength solution.

A case which illustrates this point occurred in my practice during the past year. A graduate nurse, who had been employed by me on a case of gonorrhoeal conjunctivitis in an adult, hurriedly came to my office one evening with the statement that she had been infected. An examination revealed an intensely congested conjunctiva, some oedema of the lids and a purulent discharge streaming from both eyes. A hurried bacteriologic examination of the discharge showed no

gonococci, and on questioning her the information was elicited that earlier in the evening she had felt some burning and irritation in the eyes, and realizing the danger of infection, had concluded that she had transferred some of the pus from the patient's eye to her own. Being greatly alarmed, she immediately had instilled in each eye one drop of a two per cent. solution of nitrate of silver. The violent inflammatory reaction which followed was due entirely to the action of the drug and was relieved in twenty-four hours by cold compresses and boric acid irrigations. Where a vaginal discharge is known to exist, or when there is a definite history of gonorrhoea in either parent, the vaginal canal should be irrigated with an antiseptic solution some days before labor. This, together with thorough cleansing of the conjunctival sac immediately after the birth of the child and the instillation of one drop of a two per cent. solution of nitrate of silver, will prevent the infection in nearly every instance. As soon as the diagnosis of ophthalmia neonatorum has been established it is the duty of the physician in attendance to inform the family of the serious nature of the trouble and to insist that the child be either sent to the nearest hospital or that a graduate nurse be immediately employed to take charge of the case. I know of no disease in which intelligent nursing plays so important a part and contributes so much to the success of the treatment. Unfortunately the great majority of these cases occur among the poorer classes, whose circumstances do not permit them to stand the expenses that this would entail. When such is the case efforts should be made to obtain the services of one or preferably two intelligent women to carry out the instructions of the attendant. These women must be thoroughly drilled as to the proper method of handling the case, and should be informed of the highly contagious character of the discharge and be told how to protect themselves and other members of the household. The infant and the attendants should occupy a room remote from other parts of the house, and in this room should be kept solutions for disinfecting the hands, receptacles for soiled dressings and everything used in the treatment of the case. Absolute cleanliness on the part of the nurses, burning of all dressings immediately after use, and the disinfection of her hands after each treatment should be strictly followed out. That the danger of infection of the nurse's eyes is not an imaginary one may be inferred from the following quotation by Prof. Fuchs of Vienna: "In the Vienna Foundling Asylum there were, for every one hundred infants affected with blenorrhoea (ophthalmia neonatorum), more than fifteen nurses so affected who had acquired their eye disease from the infants. I have seen a whole family affected with blenorrhoea by a child having blemorrhoea neonatorum and thus plunged into the greatest misery."

If it is found that only one eye of the infant has been infected, before instituting any treatment for the diseased eye efforts should at once be made to protect the sound eye. The Buller's shield, which is so useful in gonorrhoeal conjunctivitis in adults, is not practical for the eyes of infants. A protective bandage should be applied over a gauze compress, the edges of which next to the bridge of the nose should be sealed with flexible collodion. By thus sealing the edges there is less likelihood of the discharge passing from the diseased to the sound eye. This bandage must be removed occasionally and the eye examined for signs of infection.

In the treatment of a case of ophthalmia it should be borne in mind that there are two well defined stages of the disease, one of infiltration and one of pyorrhoea, and that three indications for treatment will arise: (1) The use of cold compresses to reduce the inflammation, (2) asepsis and thorough removal of the purulent discharge as frequently as it accumulates, and (3) the application of one of the preparations of silver to the conjunctival surface to check the swelling of the papillae and inhibit the growth of microorganisms.

The use of cold compresses to reduce the inflammatory symptoms of ophthalmia neonatorum has been in vogue for many years. It should be borne in mind,

however, that unless used with caution they are capable of doing more harm than good. In the first place the application of cold should be confined to the first stages of the disease, when the swelling is greatest and before the discharge sets in. When the swelling has been reduced the compresses should either be discontinued or used at less frequent intervals. A too prolonged application of cold will only serve to lower the vitality of a cornea whose nutrition is already interfered with by a chemosed conjunctiva and a virulent pus. The appearance of even a slight corneal haze is an indication of a loss of resistance in that structure and hot compresses should at once be substituted for the cold. Indeed, I am inclined to favor the use of hot compresses in the stage of pyorrhoea, whether or not there is involvement of the cornea. I do not believe that cold has the slightest beneficial action in this stage, and I know that heat will help to preserve the integrity of a cornea that sorely needs stimulation. The method of using the applications, whether cold or heat is indicated, is the usual one in vogue in most hospitals. Pledgets of absorbent cotton wrung out in ice cold water or hot water at a temperature of about 110° F. and frequently changed are applied to the lids for about twenty minutes in each hour during the day and less frequently at night in order to give the infant time to sleep. As soon as the discharge makes its appearance it becomes necessary to cleanse the eye at frequent intervals, and the nurse should be instructed to remove it as often as it accumulates. In severe cases, where the pus collects quickly, it must be removed every twenty to thirty minutes. The attending physician cannot too strongly impress upon the nurse the importance of not allowing this pus to remain in contact with the eyeball. She must be made to understand that if she does her duty the sight of the child will be saved, and that the success or failure of treatment will depend entirely upon her efforts. If the swelling of the lids is very great during the stage of pyorrhoea, so that it is impossible to evert them and the accumulated pus is not having a sufficiently large outlet, the external canthus should be divided down to the bone. Many advantages are gained by this procedure, and the immediate effect of the canthotomy is one to be desired. Pressure of the lids is taken from the eyeball, thus lessening the risk of corneal ulceration, the eye can be more readily cleansed and local blood letting, which tends to relieve the congestion, is accomplished. The wound from such an operation heals promptly. Many ingenious devices have been put upon the market for the irrigation of the eyes. I speak of them only to condemn their use, for in unskilled hands the majority of these irrigators are capable of doing much damage and especially in cases of purulent conjunctivitis. The method that will effectively remove the purulent material and at the same time minimize the danger of wounding the cornea is the one to be desired. The procedure I advise and which I use in my hospital work is to direct the nurse to gently separate the lids and direct a stream of saturated boric acid solution upon the eyeball by means of an ordinary medicine dropper, previously sterilized, or better still, by pledgets of absorbent cotton soaked in the solution. This is repeated often enough to wash away the pus in contact with the eyeball. If some pus is then found to remain in the cul-de-sac or upon the surfaces of the lids the latter are everted and the palpebral conjunctiva carefully wiped clean with the moistened cotton pledgets, caution being taken not to touch the cornea or to abrade it. I believe that this is the simplest as well as the most efficient way to cleanse an eye, and, to my mind, is the one that is capable of doing the least harm in unskilled hands. Many irrigating solutions other than boric acid have been suggested and are being extensively used, their virtues being supposed to be due to a more decided antiseptic action than that possessed by boric acid. I have long ago, however, come to the conclusion that the beneficial effects of any irrigating solution, in so far as ophthalmia neonatorum is concerned, is due entirely to the mechanical action of removing the pus and that the antiseptic power of the solution

does not, in any way, mitigate the virulence of the infection.

As soon as the stage of pyorrhoea has set in, in addition to the cleansing measures, the use of some preparation of silver must be begun. It is hardly necessary to say that nitrate of silver has long been regarded as a specific in purulent conjunctivitis both in adults and infants, and when properly applied it will continue to retain its popularity. It must be asserted, however, that unless used with proper precautions and applied by the physician himself one of the less active preparations of silver had better be substituted. The 2% solution, which is the strength usually employed, should never be used during the stage of infiltration. At this time it is apt to do more harm than good. Its use is indicated just as soon as the discharge becomes distinctly purulent, but never before this time, and its action should be limited to the conjunctival surfaces. The solution should never be dropped into the eye by either the nurse or the physician, but must be applied directly to the everted lids on a cotton wound applicator. After applying the silver the lids should be kept everted and the excess of the silver solution neutralized by flushing the sac with weak salt solution until the white film of albuminate of silver and the degenerated epithelial cells are washed away. The cauterizations should be repeated every twelve or twenty-four hours, according to the character and quantity of the discharge. In recent years some of the new preparations of silver have found favor with some surgeons, and of these argyrol is undoubtedly the most effective. One decided advantage it possesses over nitrate of silver is the fact that it is practically painless and may be used freely and frequently by the nurse without any risk. While I do not believe, with some ophthalmologists, that it should replace the use of nitrate of silver in these cases, I do believe that it has a distinctive value in the treatment of purulent conjunctivitis and when used in conjunction with the silver applications will not only serve to arrest the progress of the disease in a shorter period, but will lessen the danger of corneal ulceration. My usual plan is to instruct the nurse, after removing all of the secretion, to fill the conjunctival sac with a 20% solution of argyrol and allow it to remain in the eye until the next cleansing treatment is due. It is used in this way at intervals of every two or three hours, depending upon the severity of the symptoms, and its use is continued until the purulent discharge begins to assume a serous nature. Since adopting this plan of using argyrol, in conjunction with direct applications of silver to the everted lids, I have never had a corneal complication to develop in my cases of ophthalmia neonatorum.

The development of corneal ulceration in ophthalmia neonatorum has fortunately come to be a rare complication of the disease since the introduction of the newer silver salts, and in fact the infant's cornea seems to resist the action of the gonococci to a greater degree than the cornea of adults. When, however, signs of corneal infection do appear we must at once resort to the use of atropine and hot compresses. The presence of an ulcer of the cornea is not a contra-indication to the use of silver and it should be discontinued just as if the integrity of the cornea had not been interfered with. Direct applications of carbolic acid, iodine or the actual cautery to the ulcerated areas during the stage of pyorrhoea will not be of much value, for it is the experience of most surgeons that it is practically useless to attempt to treat an ulcerated cornea by direct medication as long as that cornea is bathed in a virulent pus. Atropine, hot compresses and a constant effort to check the disease causing the ulceration will accomplish about as much as we can hope for as long as the discharge is copious. In the late stage of the disease, however, when the discharge is diminished in quantity and becomes less purulent, applications to the ulcer may be of decided benefit. In conclusion, I want to emphasize the fact that since the introduction of modern methods of treatment, together with conscientious and intelligent nursing, ophthalmia neonatorum has lost many of its terrors and the great majority of cases go on to recovery without any disastrous after effects.

SOME POINTS ON SURGERY OF THE GALL TRACT.

G. C. Rodgers, M.D., Elkins, W. Va.

(Read at annual meeting of West Virginia State Medical Association, July 11, 1912.)

In discussing this subject I do not propose to bring before you anything new; neither do I want to make the impression that I believe this field of surgery perfected, for I really think it far from that, but the subject is so vast that this brief paper will be confined to what, in my judgment, are the three most important points, namely, an earlier diagnosis, fewer colecystectomies and longer drainage; and I trust that I will be able to present these in such a way that both we, as physicians, and our patients will be benefitted.

There are many reasons why we should make an early diagnosis, while the stones are still in the gall bladder and before the stage of inflammation. An operation at this time is almost without danger, but this becomes altogether different as time goes on. As for the innocent gall stones, McGuire says there are none; Mayo says they are a myth; Deaver says he has heard of them, but has never been able to demonstrate them; in short the surgeons have completely repudiated that idea, and the medical men are fast coming to the same conclusion.

We now know that almost every stone is formed primarily in the gall bladder and later is forced into one of the ducts, which gives us a very serious complication. Mayo Robson reported the first operation done for chronic pancreatitis resulting from gall stones, and it is largely to him that we are indebted for our present conception of the trouble. Since then he has stated that sixty per cent of his cases with gall stones in the common duct showed pancreatitis. In summing up five hundred cases in which the common duct was involved the Mayos give us an operative mortality of eight per cent. Again, carcinoma of the liver and gall bladder with its almost certain death is almost, if not always, preceded by gall stones, and what seems unfortunate is the fact that there is usually a considerable period of quiescence before the symptoms of carcinoma set in, but a good early history of the case will nearly always demonstrate that the stones could have been removed while they were as yet harmless.

Time is too limited to more than mention the thousands of cases that are going from doctor to doctor, getting prescriptions for red pepsin or something as worthless for their so-called stomach troubles, or, as Deaver puts it, the thousands that should have their gall stones and appendices removed and then go to the Carlsbad. Unless the experience of other surgeons is different from mine, we are seldom, if ever, consulted concerning a case of gall stones, but instead we are called during the stage of complication. The pain, fever, quickened pulse, nausea and vomiting and symptoms of like nature are not those of gall stones, but rather those belonging to the complications of gall stones, and the sooner the profession realizes this the better it will be for all parties concerned, for, as previously stated, the mortality of gall stone operations should not be more than one-fourth of one per cent., whereas the operations for the complications is attended with a mortality ranging from ten to fifteen per cent.

In my judgment cholecystectomy should never be done as the operation of choice, though I realize that to be able to show the patient and friends a large gall bladder full of stones, and at the same time a nicely closed wound, and the patient up in a few days, is often rather tempting, especially for the beginner; but on the other hand we must remember that no true surgeon will mutilate or remove a functionating organ that can be preserved.

The gall bladder is of far more importance than it was at one time supposed to be, not as a storehouse for bile, but as a regulator of its pressure. Neither the biliary nor pancreatic ducts have valves, and if for any reason the flow from these organs should be impeded they have no protection from resurgitation except the pressure-regulating functions of the gall bladder.

A second important function is the production of mucus. It has been shown both experimentally and clinically that pure bile injected into the pancreatic duct will produce acute and usually fatal pancreatitis, but this is not the case when the bile has been mixed with the mucus of the gall bladder.

Again, should we have a stricture develop in the common duct or a chronic pancreatitis calling for a cholecyst-enterostomy, we have again destroyed our best friend and converted a very simple operation into the difficult and dangerous one of transplanting the common duct into the duodenum, or, as I have been able to do occasionally, make an anastomosis between the stump and the duodenum.

Cholecystectomy has a higher mortality than cholecystostomy; it requires a larger opening, there is danger of injury to the common duct and deep vessels, it always leaves more or less raw surface which sometimes gives a troublesome oozing. We hear a good deal about gall stones reforming in a bladder that has once held them, but the more recent investigations seem to prove that the trouble is they were not all removed at the time of operation.

After studying both sides of this subject carefully I am convinced that a cholecystostomy should always be the operation of choice, and the others should only be done when circumstances make it necessary. Of course it is not possible to lay down any set rules in regard to the length of time these cases should be drained. A simple case of cholecystitis will probably do well with a few days' drainage, while a case of chronic pancreatitis should be drained several weeks, but I fear the tendency is to drain for too short a time. We would certainly do less harm to drain two or three days longer than is really necessary than to remove the drainage a few days too soon. Personally, I prefer draining all my cases not less than ten days, and many need it longer.

The fact of the case is, there is usually too much hurry about getting our laparotomy patients out of bed. I don't believe any of them should be up within two weeks after operation. I have permitted cases to get up and walk out of the hospital the third and fourth day after an appendectomy, but I never felt that I was doing exactly right, and I find the older I get the less hurry I am in to get them out.

PERSONAL OBSERVATIONS IN PRACTICE.

Everett Walker, M. D., Tunnelton, W. Va.

(Read at meeting of Preston County Medical Society, September, 1912.)

It is not with a view of making startling statements that will be new to many, if any of you, that caused me to select this subject, but with a hope that some of you can explain the statements here made.

First: *Periodicity of Disease.*—We expect contagious and infectious diseases in epidemics, at least endemics, but why diseases not in this class should act to a great extent in the same manner is a fact for which I have never seen an explanation. For years I have observed that such diseases as herpes, neuralgias, boils, abscesses, so-called bilious attacks, and many other similar diseases are endemic at least. I might add confinements, but some of you might class them as contagious, being caused by direct contact.

Second: *That mode of living and general surroundings have much to do with immunity, as well as the resisting power of persons in cases of injury and disease.*—I have observed that in burns (for example) the dirtiest, filthiest persons of all races will resist infection and make a more rapid recovery than those in more desirable surroundings, and I believe that from constant exposure to contamination they have been rendered more or less immune. I do not wish to be understood as advocating this mode of living as a preventive of disease, but in my practice this has been the rule. I have had many confinements in just such surroundings, and have never had a case of infection among this class.

Third: *That the case of a well fed typhoid patient (I mean fed from the first) runs a more favorable course and reaches*

the crisis earlier than those fed on purely liquid diet.—Give them good wholesome food similar to the diet of a well person, avoiding fats (except butter and cream) and highly seasoned food, and there will be no demand for the ice-pack or cold bath that is so shocking to many, and there will be fewer if any complications.

Being a Baptist, it is not necessary to say that I am not opposed to water, but my experience leads me to question the propriety of a cold bath for the purpose of lowering the body temperature alone, and I wish to state that where I have fed the patients liberally the temperature has invariably fallen to so low a degree that this procedure was considered unnecessary. Furthermore, that diarrhoea has never appeared except during the first few days, and soon disappeared without a change in the diet. Hemorrhage has been an unknown complication, and the temperature has invariably reached the normal and the patient gotten out of bed by the twenty-eighth day.

In my practice sweet milk has been the most unsatisfactory food I have ever given in typhoid and all other diseases that attack the stomach and bowels.

Fourth: *That in most every neighborhood there is a good old mother who comes to our assistance with "herb tea" that snatches the patient from the jaws of death.*—She cures stomatitis and removes warts by charm, reduces temperature by drawing the fever out with mustard bound to the wrists and soles of the feet, cures malnutrition by measuring the patients for "decay," relieves the suffering infant by greasing its belly for what she calls "liver grown," stimulates labor pains with egg-shell tea, and stops after-pains by standing the axe against the foot of the bed. (It must be the foot). I could enumerate many other of her cures, but most of you are familiar with them.

Fifth: *That epitheliomata make a complete recovery when infected with the streptococcus erysipelatis.*—I make this statement from observations in only two cases. In May 1903 I had my first opportunity to observe this, and once since, but the cancer was so well defined in each and the results so satisfactory that I choose to mention it.

(Last week, since writing this, I had occasion to see the first case, and after a lapse of eight years there had another cancer developed in a different location, but no development in the second case.)

Sixth: *In small-pox vaccination will give results if we will only try it.*—During the winter of 1902 and '03 I had occasion to try it in 1243 cases. The oldest person vaccinated was 74 years and the youngest 10 days old, and in every case there was immunity except in a few when I vaccinated the first day of the disease after the temperature was 104°, and in these the disease was so modified that it never reached the pustular stage. Scabs formed on the vesicles and the secondary fever never appeared. I had more than 98% of takes, and the greatest time lost from work by any patient was four days, and this was in two persons who were vaccinated on the leg, and who on account of the long walk to work lost four days each. There were no quarantine restrictions and all these people were exposed daily, and all escaped small-pox.

I also observed that whiskey greatly increased the severity of small-pox. If given before the vesicular stage the number of vesicles would be greatly increased and the ones present greatly enlarged. Out of 354 cases the only three who died were drinkers.

Seventh: The ideal case of sickness as described in text-books is seldom if ever found at the bedside, and the remedy that serves best in one case will sometimes have the least result in another apparently similar case; therefore we cannot always have a "sheet anchor."

Eighth: In order to get a reputation we should not think that we are skilled surgeons and undertake cases that belong to the more skillful, thereby exposing our patients to the dangers of the anaesthetic for a much longer time and depriving the patient of the best results. If we expect to do surgery let us prepare for it in the hospital and dead-house, and thus get the necessary equipment that we may become surgeons indeed.

Ninth: Having been a rolling stone for several [illegible] I have found that confine-

ment cases were less complicated and required much less time in some sections of country than in others. My experience being in this state only, I am at a loss for a reason which will satisfactorily account for this.

Tenth: I have found that some few physicians, from jealousy or some other reason, will sometimes forget to be ethical, and will tread on the toes of their professional brethren, thinking, no doubt, that they are reaching a higher plane with the laity. If we have such in this society, let me ask you to abandon the habit lest "your sins overtake you," and cause you to die that professional death from which there is no resurrection.

CIRRHOSIS IN A BOY OF FOUR YEARS.

By Gilman R. Davis, M.D., McDonald, W. Va.

(Read at meeting of Fayette Medical Society, October 1, 1912.)

On September 6th, 1912, I was called to a boy of four years and three months of age. He had several ulcers on tip of tongue, no appetite and no desire for play. He had no pain and no complaint of any kind. He was well nourished and had a good color. The case seemed trivial and there appeared to be no occasion for a critical examination. As I was in haste to catch a train I prescribed and left. As the treatment was of no avail, and the autopsy proved that any treatment would have been useless, I will not take time in detailing it.

The next day I was again called and told that the boy "was worse; had rattling in throat and a cough, with mucus in throat and mouth." I found his pulse 100; temperature 100, respiration rapid, prostration marked. The boy could not stand on his feet and could not or would not talk. Appetite entirely absent. Auscultation showed bubbling and coarse mucous rales. Seemed extremely ill. No change the next day except increased weakness. The teeth were tightly closed, so that it was very difficult to open them. An examination of the throat showed it to be normal, but a large amount of mucus was removed from mouth and pharynx. The fourth day showed no change except that the prostration was more marked. The next day the boy seemed to be greatly worse. Dr. T. E. McGuire saw him at 2 P. M. The temperature was 102 2-5, pulse 160. A careful examination failed to find adequate cause for the very serious condition present. At 7 P. M. I visited the patient again with Dr. C. J. Posey of Washington, D. C. The boy was in a semi-comatose condition: Temperature 101, pulse 168, respiration 68. Perspiration on nose and cheeks. On disturbing him the legs would twitch, hands close, muscles contract and show other signs of impending spasms. The teeth, formerly closed, were now partly open. Death seemed to be impending. Desiring to examine the throat I took a cotton swab and, moistening it with listerine, while Dr. Posey opened the mouth, I removed a large quantity of mucus from the pharynx and mouth. Just as I withdrew the swab the boy's lips turned blue and death occurred instantly. None of us had made a diagnosis. We could discover no satisfactory cause for his rapid decline, alarming symptoms and sudden death, although the latter was no doubt due to paralysis of the heart. I told the parents plainly that "we did not know the cause of the boy's condition and death, and for the sake of the living we must have a post-mortem examination, especially as two boys remained with some form of sore mouth." They consented, and the next morning an autopsy was made by Dr. Posey and myself, Dr. McGuire not being able to be present. On opening the chest we found numerous and strong pleuritic adhesions over upper lobe of right lung, the pleura being attached to the sternum and chest wall. On raising the lung several drops of pus escaped from the surface at apex. On section the upper lobe was found to contain numbers of small abscesses. On inspecting the abdomen we found a perfect mass of enlarged mesenteric glands, a perfect chain of them following the intestines. The liver was found to be very small and hard. On section it gritted under the knife. There were granulations on the surface which

were hard to cut, clusters of greenish yellow spots surrounded by grayish white connective tissue. It was as typical a case of cirrhosis of the liver, or hobnail liver, as I ever saw. The gall bladder was about four times the normal size. No ascites was present. The brain and kidneys were not examined.

We were greatly puzzled as to the cause of this cirrhosis in a four-year-old child. Making full allowance for the fact that cirrhosis can accompany tuberculosis, it rarely produces a condition that can be recognized clinically, and its interest is purely anatomical. I was not yet through with my investigation, desiring more of the boy's personal history. The parents keep a large boarding house for miners. The sanitary condition is extremely bad. On later conversing with the family and others the following very interesting facts were elicited. This boy, aged four years, three months and eleven days at death, had been a "cigarette fiend" since he was one year old; also a heavy whisky drinker. The men would give him cigarettes, and if they left them lying around he would take them. He would also pick up cigarette stumps from the ash pan and smoke what was left of them. His parents knew of these facts and paid no attention to the matter. The father told me this: "Why, doctor, that boy has had diarrhoea since he was a babe. The doctor said that he was weak and to give him whiskey, and we have always let him have it. I have seen him drink half a tumbler of it and it would not feaze him. The men give it to him and he drinks it all the time." Such statements seem almost incredible. To think for one moment that parents would permit or tolerate such conditions to exist in a four-year-old boy, especially commencing at the tender age of one year.

But aside from the moral bearings of the case and the lack of parental care, look at the medical aspect. We now know the cause of the hobnail liver. It was the result of chronic alcoholism, the same that we find in old, steady and excessive whiskey drinkers.

There are several points in this case that I could dwell upon—the boy's previous apparent good health, then in five days dying, simply "going to pieces." He had from four to five bowel passages a day from infancy. The bowels would be moved in bed at night during sleep or while walking about or at play. He seemed to have lost control over the rectal sphincter. The tubercular feature also is of interest. But it is the cirrhosis of the liver that I deem of greatest interest—a very rare condition in a child. When found it is generally of syphilitic origin, but in this case there was no history or evidence of luetic infection.

The extreme rarity of these cases and the attending complications in this case led me to believe that it would be of interest to the society.

THE RADICAL TREATMENT OF ACUTE GONORRHEAL EPIDIDYMITIS.

W. S. Robertson, M. D., Charleston, W. Va.

It is surprising that epididymotomy is not a more popular method of dealing with acute epididymitis. The procedure is essentially simple and the results are brilliant. Moreover, it has the sanction of the foremost genito-urinary specialists and must have the approval of any who have done this operation even in one instance.

Let us briefly consider the usual line of treatment for this common condition. We try, according to our preferences, the ice bag, dry or moist heat, filthy ointments containing any or all of the drugs at our command, strap the tumor with adhesive, etc., but in spite of all this treatment the patient "spends his days in suffering and his nights in agony" and is only granted a brief respite from pain by the use of the hypodermic. Latterly, the virtue of the bacterins in acute epididymitis has been much advertised, but the most enthusiastic advocates of this plan of therapy do not claim as prompt and sure results as are obtained by the operative treatment. To get rid of the condition within a week or ten days with palliative measures is the best we can hope for in the meanwhile, and the patient has

been in constant pain and leaves his bed a temporary wreck. Besides, who of us has not seen an epididymitis lasting for two to four weeks terminating either in suppuration or leaving a chronic tumor in the scrotum?

In contrast to this haphazard attack we have in epididymotomy a veritable God-send for these sufferers. We can promise the patient immediate relief from pain and assure him he will be up within four days or possibly forty-eight hours. There is nothing more gratifying than to see a patient who has been enduring for days the severe pains of an epididymitis resting in an easy, comfortable posture by the time the effects of the anesthetic have disappeared. Now, provided the radical treatment accomplished only this one thing, i. e., the relief from pain, and did not shorten the course of the disease, we would be more than justified in doing the operation; but we have also the following points in the patient's favor: Freedom from recurrence, the shortening of the gonorrheal process itself and a decrease in the tendency to block the vas with its consequent sterility.

The writer has had occasion to perform this operation in seventeen cases. In one case the patient having a double epididymitis, pus was found on the left side, which had been involved ten days, but no pus was found on the right side, which was of two days standing. It is interesting to note this, for the writer has never encountered pus in a case where operation was done within the first three days. Walsh claims to find it in five out of every six cases. He, however, does not state of what duration his cases were before operation. The writer believes pus formation rare within three days, and hence he insists upon early interference, permission for which is readily obtained from the patient. In conclusion he wishes to warn against attempting this step except under a general anaesthetic, for while the time consumed in operating is brief and the parts very accessible the sensitiveness of the inflamed tissues precludes the possibility of doing satisfactory work under local anasthesia.

For the operative technique the reader is referred to any work on genito-urinary surgery.

Selections

ANTI-TYPHOID VACCINATION.

By Mazyck P. Ravenel, M.D., Director State Laboratory of Hygiene, University of Wisconsin.

We owe our present method of vaccinating against typhoid fever to Sir Almroth E. Wright and his co-workers. Previous to this time Pfeiffer and Kolle had done some experimental work, but the development of the method and the demonstration of its practical efficiency is due entirely to Wright. The difficulties he encountered were tremendous and one cannot speak too highly of his ability and persistence in working out this method. During the Boer war upwards of 100,000 British troops were vaccinated. The results were quite encouraging, both as regards the incidence of the disease and the mortality of those who took sick. However, they did not come up to expectations. In 1904, on the advice of Professor Koch, the Germans in West Africa vaccinated more than 7,000 of their troops. Again the results were not entirely satisfactory, although encouraging. Since 1904 the work has been continued in the English army and more than 100,000 men have been vaccinated without any bad results and with strong evidence of protection. In India, in 1911, Col. Firth reports 112 cases of typhoid fever with six deaths among 62,624 vaccinated persons, a case incidence of 1.7 per thousand, and the mortality 94 per million. Against this there were in 8,481 non-vaccinated persons 45 cases and four deaths, a case incidence of 5.3 per thousand and a mortality of 471 per million. This shows that the number of cases among the non-vaccinated was approximately five times as great as among the vaccinated.

The French have made a study of the subject and two reports have been rendered, the majority report being favorable, the minority report unfavorable.

However, in actual practice Vincent reports that among the French soldiers in Morocco living in the midst of the most unhygienic surroundings there has not been one single case of typhoid fever amongst the vaccinated soldiers.

In the United States the method was studied by a commission and a favorable report rendered in 1909. Vaccination was officially advised, but left voluntary with the soldiers. Many took the injections, and the results were so excellent that in 1911 an order was issued making it compulsory on all men and officers in the army under 45 years of age. Without going into extensive details we may quote from the report by Col. Kean of the maneuvers along the Texas border in 1911. The Maneuver Division at San Antonio, Texas, was made up of 12,801 men. Among these men there was only one case of typhoid fever, occurring in a private of the hospital corps who had not completed his immunization. The case was very mild and recovery took place. Thus there were among nearly 13,000 troops no deaths from typhoid fever, and only 11 deaths from all causes. During the same period of time (March to July, 1910), there were 49 cases of typhoid fever with 19 deaths in the city of San Antonio, and at Galveston 192 cases of typhoid. With this remarkable result Col. Kean compares the fate of the Second Division of the Seventh Army Corps at Jacksonville, Florida, in 1898. This corps was made up of 10,759 men. There were in all 2,692 cases of what was known, or believed to be, typhoid fever, 1,729 being certainly typhoid fever. There were 248 deaths from typhoid fever in a total of 281 deaths from all causes. This was about the average of typhoid incidence in the camps of our troops during the Spanish-American war, approximately one-fifth of all of our soldiers contracting typhoid fever. While it may be admitted without argument that the sanitation of the camp at Texas was better than at Jacksonville and the other camps during the Spanish-American war, the results here given must be attributed largely to the efficiency of anti-typhoid vaccination. Up to the end of September, 1911, among 81,340 men who had been vaccinated only 12 cases of typhoid and no deaths had been reported. Although the year 1911 is considered one of unusual exposure there were only 45 cases of typhoid fever recorded during the year. In 1909 there were 173 cases and 16 deaths; 1910, 143 cases and 10 deaths. The great improvement is attributed largely to anti-typhoid vaccination.

The results recorded have been so striking that the State Hygienic Laboratory determined to manufacture and distribute anti-typhoid vaccine to physicians in the State of Wisconsin free of charge. This was begun in the fall of 1911, and up to the present time upwards of 2,000 doses have been distributed. Upwards of 1,000 of the National Guard have been already vaccinated or material has been sent for their vaccination. The laboratory recommends in addition to the vaccination of the National Guard that wherever a case of typhoid fever occurs in a family the other members of the family under the age of 45 years be protected by vaccination.

It is too early to speak of the results of vaccination in this state, and in addition to this physicians are slow in making returns to us as requested. However, we have had some very encouraging returns, and I give here one from Watertown. Recognizing the fact that one case is not enough to draw conclusions from, nevertheless the report in this case is very striking. In a family in Watertown the wife contracted typhoid fever. She had two trained nurses in attendance. Sufficient vaccine was sent for the husband and the two nurses. One nurse refused to be vaccinated, claiming that she was immune to typhoid fever. Soon after leaving the case she became ill with typhoid fever and at the last account she had been in St. Mary's Hospital in Milwaukee for nine and one-half weeks, with the prospect of remaining there for some time longer.

We are also advising the vaccination of nurses in hospitals, and this has been carried out in a number of institutions in the state. The results obtained in Boston and other places are so striking that

we feel it our duty to urge the practice in Wisconsin. Richardson and Spooner vaccinated 100 nurses at the Massachusetts General Hospital in 1911. For the first time in the history of the institution the hospital passed a year without having a case of typhoid fever among the nurses or attendants.

DURATION OF PROTECTION. . .

I am often asked concerning the duration of immunity following vaccination. We have not sufficient data in this country to pass an opinion which is of great value. At the University of Kansas, where a number of students were vaccinated, the agglutinating power of the blood was examined up to one year after. It was found to have fallen to some extent, but was still strong in everyone examined, so that if we can regard the agglutinating power of the blood as furnishing an index to protection, we are justified in saying that after a lapse of one year the protection is still very high. In the English Army Col. Firth has collected statistics which lead him to conclude that the immunity begins to diminish during the second and third years, and he recommends, therefore, revaccination at the end of two and one-half years. His tables, however, show that a considerable amount of immunity apparently remains even after four or five years. Even after this lapse of time after vaccination the case incidence per thousand among vaccinated troops is only one-fourth that of the non-vaccinated.

The vaccine used consists of the bodies of typhoid fever germs killed by heat. The temperature employed should not be above 55°C. Any temperature in excess of this weakens the protective power of the vaccine. The vaccine is preserved by the addition of one-half of one per cent. of carbolic acid. In the army three injections are given. The first dose contains 500,000,000 bacteria, and the second and third doses 1,000,000,000. The count is made by mixing the vaccine with blood and counting the bacteria and the blood cells in at least 100 different fields, comparing the number of germs found with the number of red blood cells. In civil life we are recommending only two injections, believing that with the limited amount of exposure which the average person undergoes this is sufficient. We, however, supply the third dose whenever it is desired.

The vaccine is injected under the skin by means of the ordinary hypodermic syringe. The injection may be made in any part of the body, but the abdomen will be found one of the most convenient points of inoculation. In the United States Army it is recommended that the inoculation be made in the arm at the insertion of the deltoid muscle. The injection, wherever made, must be subcutaneous and not into the muscles. Before making the injection the skin must be cleansed as for any minor operation. The syringe and needle should be sterilized by boiling in a two per cent. solution of soda. A fresh needle should be used for each patient or else the needle resterilized for each injection. The injections are best made about 4 o'clock in the afternoon, as the greater part of the reaction following will then be over before morning. There is both a local and general reaction. Locally, a red and tender area as large as the palm of the hand will form with occasional tenderness in the neighboring glands. Suppuration has not been observed.

The general symptoms are headache and malaise, with a moderate degree of fever, which may persist for twenty-four hours. In susceptible individuals the reaction may be more severe, and a distinct chill may occur, but no bad results have ever been noted. Injections should only be made in those who are healthy and free from fever.

The use of alcohol in any form increases the severity of the reaction.

The vaccine is well borne by women and children, but the dose should be reduced according to the body weight.—*Wisconsin Medical Journal.*

Small clinging pieces of adenoid tissue which have not been removed by the curette will very likely set up an inflammatory reaction on the posterior pharyngeal wall which is more distressing than the adenoids themselves.—*American Journal of Surgery.*

THE DOCTOR'S BILL.

In this day of economic medicine the practitioner who neglects the business side of his work lowers the dignity of his calling in the public eye. The man of independent means may play tne philanthropist, but in so doing he adds to the burdens and temptations of his less fortunate brother whose practice must support a family. There is nothing so despicable as a well-to-do doctor rendering gratuitous service to the pay-as-you-please class. Some of the so-called leaders in the profession may be found the worst offenders against the spirit of the principles of ethics in this matter of cutting fees.

For attending a case of pneumonia, typhoid, appendicitis, childbirth or plain imagination, a physician is entitled to reasonable compensation, depending, first, on his personal valuation of his own services; secondly, on the time devoted to the effort, and, finally, on the prevailing standard of fees in the community. The patient's prominence or wealth has little or nothing to do with the amount of the fee justly charged; it should not affect the doctor's fee any more than it should affect the price of an automobile or a pair of shoes. A doctor must be either a business man or a beggar.

It is unwise and unnecessary to itemize the bill further than stating the date and nature of the service rendered. Were doctors' bills never itemized the public would not be continually howling about our charges. A lawyer spends half the time a doctor does learning his business, yet he commands a fee beside which the doctor's looks pigmy; and the reason he collects that fee is that he charges for the case rather than for each individual consultation or interview.

A fee bill is an instrument which should be retained in our own hands as a guide in fixing charges; it should never, under any circumstances, be made public. Publication of itemized fee bills is precisely upon a par with a butcher's tariff for various cuts of meat; medical societies forget the dignity of their function when they offer fee-bills to the public press. What purpose is served by making the matter public? Just this: the bargain hunting share of the public concludes that the "doctors' trust" is trying to rob the people, and there is a scramble for the cheap man. Does the fee bill force the cheap man to charge a reasonable fee? Not at all; it boosts his business interests among the very class he caters to. A fee bill, if it is to serve any good purpose, should be held sacredly confidential among ourselves.

If a practitioner for any reason whatsoever sees fit to reduce his fees below the minimum, for one or for all of his patients, that is his own personal business, and nobody has any right to interfere. There is no medical trust, no medical union, no boycott. Time will teach him the lesson he needs without our concern. He will learn one day that the public, after all, gauges a man's ability by his self-esteem. Look about you in your own community and see whether this is not true. The good men command the best fees; and one reason they are good men is because they have *demanded* the best fees. *Idemque* the cheap men.

Of course every practitioner today makes a record of each visit or treatment at the time it occurs, but this is for clinical purposes, and should be separate from the memorandum of account, for obvious business and legal reasons. The physician who cannot obtain a settlement of his accounts without resorting to the antediluvian itemized bill should begin to educate his clientele to better ways. The patient who can trust you to administer poisonous drugs or use the knife should certainly trust you to render an honest bill.

Our forefathers in the healing art, being great guessers, were afflicted with a false modesty which made them ashamed to take the money; and furthermore, their competition was inconsiderable as compared with that of today—I mean their extra-professional competition. Our work is at least two-thirds scientifically accurate and only in small part guess-work. Therefore, why are we ashamed to take the money?

We are ashamed. We want our patients to know that we are conscience-

stricken in collecting fees; we confess a lack of self-esteem daily. We "throw off" a certain percentage of a reasonable and just account, from motives of shame or guilt or greed—in order to effect a settlement. How many business firms practice such a ruinous policy? Some of the public utility companies do, it is true, but why? To catch the irresponsible customer, and the little ten per cent. rebate is always added to the charge in advance, you may be sure. We never see a merchant—other than the old style Jew clothier—offering 20 and 50 per cent. reductions on accounts *past due*. No, indeed, that is a rite sacred to our profession—a hereditary rite handed down by those guessing medical ancestors who were by contrast properly and reasonably ashamed to take the money. It is high time we should rise to the position of any honest laborer worthy of his hire. Whatever amount we charge in the bill, be it great or small, we should hold to that amount just as though we had loaned the money.

A doctor's bill no longer needs an excuse tacked on the top. Nobody worth while feels insulted when the doctor asks for his pay. It looks more business-like, and it certainly makes for better business results, to omit that apologetic phrase so many have printed at the head of their statement—"Monthly Statement," or "Quarterly Statement," as the case may be. Some timid souls, in their excess of modesty, go even further in this abject confession of weakness: "Monthly Statement," runs the apology, "Bills rendered monthly. This is *not* a demand for settlement." For Heaven's sake., then, what is it—a letter of condolence? If a creditor doesn't expect settlement, why shouldn't the debtor thrust the bill aside until more pressing matters like butchers' and grocers' bills are met? My printer's statements bear this legend: "All bills due and *must* be settled within ten days from date"—and my printer is a great success in his business. It's bad business to pay a bill before it is due; the debtor might better place the money in bank at interest—or buy a phonograph.

Let us get what we are charging for. The [illegible] *Professional Services* do not signify cure or even improvement, but merely the best aid the doctor can render under the conditions surrounding the patient. The fee, no matter how large, despite certain philanthropic colleagues, is never exorbitant, provided the doctor has put forth an earnest effort in behalf of his patient. A life or a limb, or health itself, has no price that can be expressed in figures. Whenever you find yourself thinking that any fee you may have collected was "easy money," forget it quickly! With that delusion in your head your income is bound to diminish. The healthy way to look upon one's business position is this: *I am not half paid for all the good I do.* Could every doctor repeat these words with sincerity the contract evil would shortly die of inanition. Such a feeling cannot help but make a man a greater success in his profession.

It is an excellent tonic to have occasional bargain hunters desert you to search for a cheaper man. It stimulates your self-esteem, and it increases the deserters' respect for you. They often come back. The force of psychology brings them back; they reason that a man who demands a given fee must be worth it. Every practitioner of medicine must set his own price and make his own reputation. To drift along with the ill advised intention of weeding out some day is a very doubtful policy to pursue; weeds grow faster than good plants, and choke off the good plants in time. The thrifty gardener keeps the weeds down from the beginning. Better to content yourself with a $3,000 practice, eighty per cent. collectible, than to struggle with a $5,000 practice, only fifty per cent. good.

In small villages where the regular profession fixes on a dollar or a dollar and a half for visits, and fifty cents or a dollar for office consultations, the business-like osteopath steps in and demands three dollars for visits and two dollars for office treatments. The public pays the difference for psychic reasons—and the same motive has much to do with the increasing popularity of all the healing fads. It is time the regular profession should lift up its head and help itself.—WILLIAM BRADY, M.D., in *New York State Journal of Medicine.*

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*
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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

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Editorial

STOP! LOOK!! LISTEN!!!

At the last meeting of the State Medical Association the following resolution, presented by Dr. C. A. Wingerter, was unanimously adopted:

Resolved, That the Committee on Medical Defense is hereby authorized to prepare and mail to every reputable physician in the state not now a member of this Association a circular letter pointing out the advantages of membership in the Association, the expense of same to be paid out of the Defense Fund.

The purpose of this resolution is to gather into the society every practitioner possible whose membership will be of benefit to the society. There are still a few, a very few, we would fain hope, whose membership with us would fail to bring any honor or benefit to us. Even these would be benefited by close affiliation with the honorable, upright, progressive men who are now with us. They would learn quite a good deal of medical progress, see how very different are the habits and conduct of these men from their own, and might be made to believe that in order to succeed in medical practice it is not necessary to backbite, slander and undermine one's fellow practitioners. They might learn that one's best interests lie in upright conduct on all occasions, and that such conduct always brings a peace of mind and a degree of self-satisfaction that the dishonest doctor knows naught of. But can we afford to affiliate with such men? We leave this question to be determined by the local societies. *We do want these organizations to examine their territory, pick out every practitioner whom they believe to be worthy of membership and send a list of such to us.* This is a matter of vital interest to our Association.

At present we have not many over one-half of the practicing physicians of the state in our society. We should have at least three-fourths. Beyond this number we can scarcely hope to go. There are some so ignorant they can never be made to understand the benefits of a medical society. There are others so "wise in their own conceit" that they cannot be made to believe it is necessary to learn anything more. There are others who do not care to be put under restraint such as membership in a society of gentlemen would impose. And there are the few above alluded to, whose membership would add nothing of value to any medical organization. The members on the field are in a position to tell the good from the bad, the hopelessly bad from those who by proper associations may be reclaimed to lives of decency and honor. Let us be somewhat liberal in our invitations and try to do the greatest good to the greatest number. But by all means let us now move toward the upbuilding of the local organizations and the State Medical Association, which have for many of us been of the greatest benefit and whose existence and work are bound to benefit the state at large through all the years to come.

We cannot as physicians progress without medical organizations. This is a question that does not admit of discussion. The leaders of the profession everywhere are in the societies. The learners of today, the leaders of the future, are in the societies. The ambitious, modest man who desires to advance his own interests, though never

ambitious for leadership, is in the societies, or desires to get in, and will get in if properly approached. Now is the time to strike for a rapid advance. Since the movement has been by resolution started, let us not in any way hinder its success. Be not indifferent in the matter. Present the cause to your local society at its first meeting. Keep at it until proper action is taken. The local secretary should have assistance in making out the list of names here called for. The censors should determine who shall be invited to join with us. These lists should reach us at the earliest day possible, that the new members may be in the society at the beginning of the next year. We promise that every one whose name reaches us shall soon receive a letter from the Chairman of the Councilors, and we shall at once send all samples of the JOURNAL.

By such united effort there is good reason to expect a speedy and large increase in our membership. With increasing membership it will be easier to secure new members hereafter. Thus the growth and progress of our state organization will be assured, and its future will be a grand success. *Do not lay this down and forget it!* Turn out at your next meeting in force. Have this editorial read aloud. Discuss it fully. Then organize a plan of action and keep at it until every desirable man within your territory is reached. The success of this movement means a larger and better JOURNAL, a larger and better State Association, a better class of practitioners in the state, a better feeling among the practicing physicians and a better chance for the securing of the respect and consideration which are due us from the "powers that be" and the powers that are to be in the future. "In union there is strength," and in united determination is there the assurance that we shall hereafter receive a full consideration for any proper demands that we may make. *Forward all along the line!* S. L. J.

HOW SHALL WE PROTECT OUR PUBLIC MEN?

American is a land of paradoxes. In many respects we are the most alert people in the world, and yet in many other respects we show a supineness that is hardly credible. Those who speak for us are prone to boast that for Americans to see a need is for them to seek and find the remedy for that need. Alas, from time immemorial it has been true that the braggart is not to be taken at his own valuation. Let us take an instance. From the time of President Jackson assassination has repeatedly sought the lives of our chief magistrates of nation, states and cities. Three presidents of the American republic have died by the hand of the assassin in about half a century. Even in Russia but two rulers have met their deaths thus since 1789. In this same period one ruler was assassinated in France, one in Italy, one in Austria and none in England or Germany. We have a preeminence in this matter for which we have no reason to be proud. There is a need for remedy or prevention here that is obvious to all.

What has been done in the way of remedy since that day in January, 1835, when the life of President Andrew Jackson was attempted? Absolutely nothing. The newspapers have published their columns of twaddle, Congress has talked again and again, and at every cross-roads store the village philosophers have descanted to their heart's content, but of practical value absolutely nothing has been done except to fall back upon the world-old device of recommending or providing a body-guard of one or more men to seize the assassin after he has dealt his treacherous blow. A very few days only have passed since the attempt was made upon the life of ex-President Roosevelt, and already we have lapsed into our accustomed lethargy on this subject. Heretofore we used to hear, on the occasion of an attempted or successful assassination of a public man, a cry for the modern American cure-all for the ills of the body politic—a new law for the statute books. Even the cry for that futile remedy is hardly to be heard this time. Is American inventiveness at last exhausted or is the evil irremediable?

The immediate occasion of these reflections is a communication from Arthur MacDonald, the criminologist of Washington, D. C., calling attention again to the fact that he has been "advocating in Congress, state legislatures and with mayors of large cities for many years a plan to lessen or prevent crime and other abnormalites, es-

pecially such as the attempted assassination of Colonel Roosevelt." What he proposes is the establishment of unnumbered laboratories under the control of federal, state and municipal governments "for the study of the criminal, pauper and defective classes." When any one sends to the President, Governor or Mayor, or any prominent citizen threatening letters, or repeatedly utters threatening words, or attempts to injure such officials, or is unreasonably insistent in demanding to see them personally, such individual should be detained at least a few hours and thoroughly studied by scientific experts in criminal anthropology, psycho-physics and social pathology." The sample bill offered by MacDonald provides for "a director" at a salary of three thousand dollars, "a psychologist" at two thousand dollars, "a translator" at one thousand two hundred dollars, "a stenographer and typewriter" at one thousand dollars and one mechanic at nine hundred dollars. Five thousand dollars are to be appropriated for "the proper equipment and carrying on the work and rental of rooms," etc. MacDonald naively remarks that "it is not expected that such an extensive field of work as indicated in the bill will be undertaken at the outset." On this point we agree with him most heartily; it is not to be expected.

There can be no doubt of the high purpose and good-will of the proposer of this plan of saving from assassination our public men. There can be no doubt of the great benefit to be derived from such a study of the criminal and abnormal classes as he has in mind. But its widespread adoption cannot be hoped for. Even if the great expense were not a deterrent it would meet with the deadly opposition of indifference because of its visionary and impracticable character. This plan could not keep the promises it makes. Let us suppose that such bureaus or laboratories as it purposes are established and that in them have been examined all the criminals, paupers and mental and physical defectives in America. What is to prevent some sane, normal and intelligent man, impelled by disappointed ambition or personal hatred, from killing one of our presidents on the very next day after the scientific criminologists have complacently completed their arduous labors? Who can read the hearts of men or in them change hatred to love, pride to humility and disappointment to contented resignation? Our vaunted science has far to go before it can accomplish this, and the police power of the state is just as helpless as science in this regard.

The plan is therefore impracticable as an efficient remedy against the assassination of our rulers. In addition to this it is vicious in principle, and if adopted would be used inevitably as a weapon of oppression. It is vicious in principle because it would be a further advance along the path towards the "magnification" of the state which we have already traveled too far and which if followed to the end would lead us inevitably to the dreadful tyranny of Socialism, which makes the state the supreme master of the individual and the family and the supreme arbiter and purveyor of all their rights.

On one occasion in the English parliament when an excited speaker, after finishing a strenuous oration, took his seat hurriedly and sat upon his hat, a witty Irish member perpetrated the following bull: "I heartily congratulate the last speaker upon the fact that when he sat upon his hat his head was not in it." MacDonald has no doubt been calling upon congressmen and other public officials demanding to see them personally concerning his proposed bill. The bill itself is aimed against those "who are unreasonably insistent in demanding to see public officials personally." If, as is probably the fact, some of the public officials who have received Mr. MacDonald deem him unreasonably insistent in his demands to interview them about his proposed measure, then we heartily congratulate the gentleman that the bill is not effective, otherwise he might be turned over to his own bureau of social pathology, etc., for investigation. Or, again, just imagine the troubles we would invite upon our country in the matter of persistent creditors. Many public men have contracted bills which they are not always in a hurry to pay. Let us suppose for a moment—and it is not an unreasonable supposition—that the tailor, the grocer, the butcher, the landlord, or even the doctor, might think that his bill should be paid, and, looking towards that end, should be insistent upon demanding interviews with his prominent clients to an extent which these distinguished gentlemen

should judge "unreasonable." Who is to be the judge of the unreasonableness of the insistence upon an interview? If the prominent public man shall pass the judgment which one of the sanest among us would be safe from the tyranny of MacDonald's "director, psychologist, translator, stenographer and typewriter and mechanic?" A moment's thought is sufficient to indicate the length and depth of tyranny that would be open through the channel of such a measure as is here discussed. The matter of present interest with regard to this measure is that it is now pending before the judiciary committees of both houses of congress. A word to the wise is sufficient.

No one denies the evil exemplified in the recent attack upon Colonel Roosevelt. We all would gladly welcome a sane and practicable remedy. What the remedy is we shall not venture to suggest here. It is, however, our sincere and unprejudiced judgment that the remedy is not to be found in the laboratory bill now before the Federal Congress. C. A. W.

THE NOBLE PRIZE IN MEDICINE.

This much coveted prize comes this year to this country. These prizes have been awarded since 1901. The first was to Behring for his discovery of diphtheria antitoxin. Dr. Alexis Carrel, who won the prize this year is a native of France, and a graduate of the University of Lyons. Soon after receiving his degree he came to this country and worked for a year or two in the laboratory of the Chicago University where he accomplished wonderful results in suturing blood vessels and in transplanting organs. He is now connected with the Rockefeller Institute for Medical Research in New York.

G. D. L.

In this connection the following from the *N. Y. Times* is of interest:

For the first time in the history of the world the life saving labors of a physician have won recognition worthy of the man and his work while he was still living to enjoy the fruit of his endeavor.

This is the first instance in which an unprejudiced committee, regardless of nationality, has deemed a physician worthy of distinction and substantial reward.

It is an inexplicable psychical phenomenon that the world does not honor the life saver as it does the life destroyer. Even the tyro in history has read of Alexander the Great. How many otherwise well informed persons know aught of Hippocrates, the father of medicine, who is more entitled to the appellation of "great"?

William Harvey, whose discovery of the circulation of the blood revolutionized medicine, would be a myth to the average student of history, while his contemporary, Wallenstein, would stand out in gory grandeur in his mind.

Where are the monuments proclaiming to posterity the liberation of the world from that terrific scourge smallpox? Two attempts to erect such a monument failed; now there is one in London.

William T. G. Morton, the discoverer of anæsthesia, which has delivered millions from pain and fear, is honored by a modest shaft erected over his grave by his colleagues, while his military contemporary Winfield Scott is every schoolboy's hero.

Oliver Wendel Holmes, the discoverer of prevention of a disease which formerly carried thousands of mothers to an early grave, is only known as a writer; his life saving achievement is barely known even to physicians who practice it.

The achievements of such men have saved more lives than all the military heroes of and since their time; the former have brought joy and hope to vastly more households than the latter have plunged into sorrow and despair.

It is indeed a refreshing sign of the time to note the adequate reward of a man whose victory is for life, an achievement for peace and good will to man.

LETTER FROM THE SECRETARY.

DAVIS, W. VA., Oct. 5th, 1912.

To the Editor:

It has occurred to me it might be interesting to know about how our organization stands throughout the state. If we are to do anything further towards increasing our membership we must know where the work should be attempted.

According to the American Medical Association Directory there are in the state 1,639 physicians. Our membership for 1911 was 826. This would leave non-members to the number of 813. Of these I am only able to locate 753, leaving 60 unaccounted for.

In the First Councillor District there are 167 non-members. These are divided among the various counties as follows:

Hancock 7, Brooke 6, Ohio 31, Marshall 26, Wetzel 21, Marion 31, Harrison 42.

In this district there is but one county unorganized, viz: Wetzel. In 1900 Wetzel had a population of 22,800, now probably many more.

Think of that, 25,000 people dependent

on physicians who have not "get up" enough to organize a County Medical Society.

In the Second Councillor District there are 121 non-members.

In Monongalia 26, Preston 12, Taylor 3, Barbour 8, Tucker 6, Mineral 5, Grant 5, Hampshire 7, Morgan 9, Berkeley 16, Jefferson 8, Hardy 4, Pendleton 7, Randolph 5.

In this district Pendleton alone has no organization. Pendleton was organized about three or four years ago, but has fallen by the wayside.

In the Third Councillor District there are 134 non-members.

Kanawha 47, Clay 3, Fayette 23, Nicholas 17, Webster 3, Pocahontas 8, Greenbrier 12, Summers 10, Monroe 11. In this district Clay remains unorganized.

The Forth Councillor District contains 158 non-members.

In Tylor 10, Doddridge 8, Pleasants 6, Ritchie 8, Gilmer 11, Braxton 12, Calhoun 5, Roane 15, Wirt 6, Wood 38, Jackson 21, Lewis 13, Upshur 5. In this district Gilmer and Roane are unorganized.

The Fifth Councillor District contains 173 non-members.

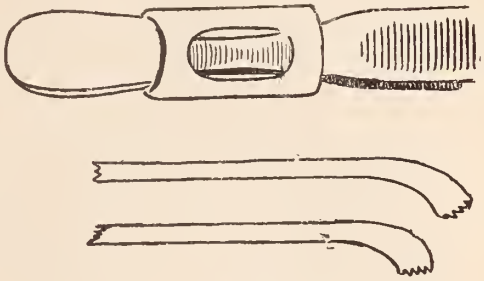
Mason 17, Cabell 40, Putnam 13, Wayne 12, Lincoln 8, Mingo 7, Logan 8, Boone 4, Raleigh 29, Wyoming 5, McDowell 11, Mercer 19. In this district Mason, Putnam, Wayne, Lincoln and Wyoming remain unorganized. Mason has permitted its organization to die but several members joined the Cabell County Society.

Think of it, Mason County is the home of the Secretary of the State Board, the man above all others who should be interested in our Association. What an incentive to the young men who come up before him for examination.

I have recently called the attention of the two candidates for Governor to the fact that the present Board of Health contains several members who are not affiliated with the State Association, also to the appointment of such men to State Institutions. If each one of our 826 members would do likewise it would make a lasting impression.

Of course the above figures are not absolutely correct, but I believe them to be approximately so. We know that many of the above number listed as non-members are physician in name only. Some are retired, others never became active practitioners, others are engaged in the drug or other business, and still others are not sufficiently ethical to become members.

It does seem to me, however, that the State Association should have from 1,000 to 1,200 members, and it is up to all of us to do our part towards increasing the membership. A. P. BUTT, *Sec'y.*



A NEW CLAMP

Adapted to Skene's, Pynchon's, or Robertson's Tonsil-seizing Forceps.

W. P. MEGRAIL, M.D., WHEELING, W. VA.

The clamp is an elongated fenestrated metallic ring or band of sufficient size to encircle loosely the distal or handle end of the forceps.

To keep the clamp in place, a small point, pin, rivet or screw projects inward at the distal end of the clamp and passes loosely between the blades.

The forceps is held as usual between the thumb and first finger, and when the tonsil is grasped the clamp is slid forward until it stops by a slight mention of the end of the third or fourth finger in one of the fenestra; the blades of the forceps will then be locked together with the same degree of tension that was made by the thumb and finger.

Advantages: Simplicity. Cannot get out of order. Easy to clamp and unclamp.

Small size snare or tonsillotome will pass over it readily. *Will hold firmly any sized "bite"* with any amount of tension desired, without having to be forced to a certain point to make it catch, as is true of other styles of clamps which often crush and tear the delicate tissue, thus making a difficult and ragged operation.

A little more confidence and respect for ourselves and our calling, a little more tolerance for our fellow workers, and a recognition of this all important fact, that the public will trust and respect us only to the extent to which we trust and respect each other—this is the secret of a new era of professional prosperity.—*Exchange.*

CONFERENCE OF STATE SECRETARIES.

One of the most important meetings since the reorganization of the American Medical Association at St. Paul, in 1901, was the Conference of the Secretaries of State Societies, called by the Committee on Uniform Regulation of Membership at the Association headquarters, Chicago, October 23 and 24. This committee was appointed in 1908, in accordance with a recommendation made in the Secretary's report for that year. At the Atlantic City session, last June, the committee summarized its reports for the last four years, and recommended that a conference of state secretaries be authorized to consider the entire question of membership conditions in the county, state and national organizations. This recommendation was referred to the Board of Trustees and a conference between the committee and the state secretaries was authorized by the Board of Trustees, to be held at the same time as the October meeting of the board. Appropriations were made for paying the expenses of all state secretaries who attended the meeting. The conference was called to order at 10:30 a. m., Wednesday, October 23, at the Association building in Chicago, by Dr. Thomas McDavitt, secretary of the Minnesota State Medical Association and chairman of the Committee on Uniform Regulation of Membership.

THE ATTENDANCE.

Representatives were sent from all states except Alabama, Colorado, Connecticut, District of Columbia, Florida, Kansas, Kentucky, New York, South Dakota, Virginia and West Virginia.

THE PROGRAM.

The following program was carried out:

1. Call to order, Dr. Thomas McDavitt of Minnesota.
2. History and Development of Membership in the American Medical Association and Its Component Parts, Dr. F. R. Green.
3. Some of the Difficulties of Present Situation, Dr. A. R. Craig.
4. Remedies Proposed by the Committee, Dr. Thomas McDavitt.

In addition to the above Dr. George H. Simmons, editor and general manager, discussed the question of membership in the American Medical Association, and the changes in name proposed by the Board of Trustees.

REPORT OF THE COMMITTEE ON RECOMMENDATIONS.

After two days' discussion it was evident that the secretaries present were agreed as to the advisability of a uniform fiscal year for all parts of the organization, to coincide with the calendar year, and that they favored the expiration of membership at the end of each year and a complete revision of the membership rolls at the beginning of each year. The committee on recommendations, consisting of Dr. E. J. Goodwin, Missouri State Association; Dr. Wilfrid Haughey, Michigan State Society; Dr. Perry Bromberg, Tennessee State Association; Dr. William S. Gardner, Medical and Chirugical Faculty of Maryland, and Dr. F. R. Green, secretary of the committee and of the Council on Health and Publication Instruction, brought in a report recommending the adoption of provisions on these two points, and that all other points be deferred for further consideration. The rep of the committee follows:

The Committee on Recommendations herew submits the following report:

1. We recommend that this conference endo the plan of having the fiscal year coincide w the calendar year in all parts of the organi tion. We further recommend that secretaries all state associations which have not alrea adopted this provision bring this matter to attention of their associations and recomme its adoption.

2. We recommend that constituent state as ciations adopt provisions making dues in com nent societies payable on January 1 of each ye and requiring county secretaries to report state secretaries all members in good standi together with their per capita assessment for current year not later than March 31. State cieties desiring to do so may provide a shor period.

3. The recommendation regarding the th question under discussion is covered by our r ommendation of the second.

4. Regarding the prorating of dues, we reco mend that this be made optional with each co ponent society.

5. Regarding an admission fee for members we recommend that this be made optional w component societies.

6. While the committee recognizes, as a ge eral principle, that a uniform system of blan for county and state societies is desirable, soon as practicable, we recommend further co sideration of this question at a later conferen

7. We recommend that the House of Delega of the American Medical Association be asked consider the advisability of issuing charters constituent state associations.

8. We recognize the desirability and advanta of a uniform method of transfer, but this syst cannot be established until there has been veloped a greater uniformity in other details organization. We therefore recommend that t question be made the subject of discussion at future conference.

9. The committee recognizes the value of t conference to the state association secretari and to the purpose of organization; it therefo recommends that future conferences of this cha acter be held.

The report of the committee was unanimou adopted by a rising vote. It was also moved a carried that the secretary be requested to se copies of the report to each state secretary a to each state journal, and that the proceedings the conference, as published in the *Bulletin*, furnished to each state secretary desiring the in sufficient quantities to send one to each me ber of the state association. After a vote thanks to the Board of Trustees for making t conference possible by the appropriation, the co ference adjourned.

SOME VALUABLE PRODUCTS FOR TH TREATMENT OF DISEASES OF BACTERIAL ORIGIN.

Phylacogens, very late remedial agents, we originated by Dr. A. F. Schafer, of Californ To the uninitiated it may be said that the ter

lacogen means "phylaxin producer," being ved from two Greek words signifying "a d" and "to produce." The Phylacogens are le aqueous solutions of metabolic substances rated from a large variety of pathogenic eria, such as the several staphylococci, otococcus pyogenes, streptococcus erysipelas,

our Phylacogens are now offered to the med- profession: Mixed Infection Phylacogen d in the treatment of bacterial diseases of nown etiology), Rheumatism Phylacogen, sipelas Phylacogen, and Gonorrhea Phylaco- They are said to be producing excellent lts in the treatment of the various patho- al conditions in which they are indicated. y are administered hypodermically—subcu- ously or intravenously—preferably by the former method, the latter being advised only ases in which a quick result is demanded.

ne Phylacogens are prepared and marketed Parke, Davis & Co., who have recently issued -page pamphlet which describes them in de- —the process of manufacture, therapeutic in- tions, dosage, methods of administration— ything, in fact, that needs to be known by man who desires to use phylacogens. Every ician should have a copy of this valuable det. Write to Parke, Davis & Co., Detroit, h., ask for the "Phylacogen pamphlet," and tion this journal.

HE PNEUMONIA CONVALESCENT.

spite of all of the modern advances in scien- therapy, and the improvements in the gen- handling and management of acute infec- s diseases, Acute Lobar Pneumonia still rves the title ascribed to it by Osler: "The tain of the Men of Death." There are, how- , especially during the Fall and Winter ths, many cases of the lobular or irregular umonia that so often complicates or follows Grippe. When this condition supervenes it is e than likely to follow a subacute or chronic se and convalescence is frequently long de- d. Under such circumstances, in conjunction treatment designed to hasten resolution, a ral blood tonic and vitalizing agent helps erially to shorten the convalescent period. to-Mangan (Gude) is of much value in this , because it not only increases the solid ele- ts of the blood, but also acts as a true tono- ulant to the organism generally. As Pepto- gan is free from irritant properties and con- ting action, it is especially serviceable in the nstructive treatment of the devitalization fol- ng the Pneumonia of the aged.

GYNECOLOGIC THERAPEUTICS.

he tremendous growth of gynecology in re- years has been confined especially to sur- l therapeutics. Even Skene several years regretted that medical treatment of female rders does not receive its merited attention. practitioner is, therefore, compelled to rely fly on remedies which have been tested by cians with years of experience having the opportunity for observation. The most fre- nt diseases of women are those that arise n functional disturbances of the pelvic organs. For these we call the attention of the medical profession to *Dioviburnia,* a combination of vegetable drugs, which has stood the test of many years as an efficient tonic and sedative to the female generative organs.

EXTENDING TO OTHER COUNTRIES.

It is claimed that more "Storm Binders" are being sent out to every state in the Union, also to Canada, and even to Mexico, than of any other make. This does not excite the least surprise on our part for from an extended experience with them we have come to regard them as well night perfect. We have yet to see a patient to whom we have applied one that has not expressed the utmost satisfaction, even gratitude.—(Editor of *Mass. Medical Journal,* Aug., 1912.)

State News

NOTICE.—The next annual meeting of the State Medical Association will be held in Charleston May 21st, 22nd and 23rd, 1913. It is desired to make this the largest and best meeting the Association has ever held. We are going to grow some from this time on. Get your new members all in by January 1st, and then get your brain in good working order for some first-class papers. Let us honor the State Capital by the biggest and best ever.

* * *

BORN.—To Dr. E. A. Hildreth 2nd and wife, a daughter. Our hearty congratulations. May the nine living ones be saved to be as useful and honorable citizens as are the parents.

* * *

REMOVALS.—Dr. Fleming Howell, our distinguished ex-president, has removed from Clarksburg to Oakland. We shall miss the doctor, but hope he will not forget his old friends and companions in the medical fraternity.

Dr. Geo. H. Benton, formerly of Chester, W. Va., is now located at Mine Run, Va.

Dr. J. S. Biddle, late of Charleston, has located at Gallipolis, Ohio.

Dr. E. F. Peters has removed from Maybeury to Switchback.

Dr. G. B. Lovett, who for a year has been practicing at Glenville, has returned to his old home at Bulltown, and will resume practice there.

Dr. C. A. Willis, late of Jenningston, has located in the Industrial Addition of Clarksburg.

Dr. S. P. Carter of Gauley Bridge has removed to Montgomery.

Dr. E. C. Park, of Charleston, has located in Scranton, Pa.

* * *

DEATHS.—Dr. M. F. Clark, late of White Sulphur Springs, died recently. We have no particulars.

Dr. Gist Palmer, late of Wellsburg, died in a Pittsburgh hospital of tubercular peritonitis, aged 43 years. The doctor was a graduate of Washington-Jefferson College, Pa. He was one of Wellsburg's leading practitioners. A wife and young daughter are left to mourn his loss.

After a long illness, Dr. Emory Strickler, for nearly half a century a practicing physician of Harrison county, died Oct. 27th at his home at

Shinnston, aged 88 years. He was Harrison county's first superintendent of schools, having been elected to that office in 1863. Mrs. C. L. Watkins, of Shinnston, and Dr. Emory W. Strickler, of Fairmont, are surviving children.

Jesse F. Trippett (license, West Virginia, 1904); a member of the West Virginia State Medical Association, died at his home in Fairview, W. Va., August 20, from tuberculosis, aged 36.

Abel Huston Thayer, M.D. University of Maryland, 1876; a member of the American Medical Association and the American Association of Railway Surgeons; a veteran of the Civil War; for several years president of the Taylor County (W. Va.) Board of Health; local surgeon for the Baltimore & Ohio Railroad; for two terms a representative in the West Virginia legislature; died at his home in Brafton, September 8, aged 70. Dr. Thayer was also an ex-president of our State Association, and yet we have to learn of his death from a Chicago Medical Journal. This is a reflection on the local society, a duty of whose secretary it is to report all deaths to the Journal. This duty was imposed years ago by a resolution. Other secretaries will please take notice.

* * *

IN MEMORIAM.—Dr. C. E. T. Casto, aged 58, was a native of Jackson county. In his early professional life he settled at Rockport, Wood county, where he lived many years. Later he moved to Belleville, Wood county. While here he was appointed a member of the U. S. Pension Board at Parkersburg. Nine years ago he removed to Parkersburg and built up a large practice. Several years ago he associated his son, Dr. Clarence Casto, with him. Five years ago he was dangerously ill for a long time with a disease similar to that which ended his life. He was a successful physician of great industry, of a kind and pleasing personality, which won for him very many friends, and of such intelligence as made him a successful physician — qualities which endeared him to a host of friends and patients, who deeply lament his loss. Cut off when he appeared to have years of usefulness before him—a long and close association with him on the Board of Pension Examiners and afterwards prompts this notice.—W. H. S.

—

Dr. John Fanning Young Paine, late of Galveston, Texas, but for the last two years a resident of Charles Town, West Virginia, died in that town October 2, 1912, aged 72 years.

Dr. Paine was born in 1840 at Baton Rouge, La. His medical education was begun at the University of Pennsylvania and completed at Tulane University, graduating in 1861. He served as a surgeon in the Confederate Army and later as staff surgeon at Fort Morgan and Mobile. After the war he located at Mobile for the practice of his profession. In 1876 he went to Galveston as professor of obstetrics and gynecology in the Texas Medical College, and filled the position of dean until 1881 when the school was dissolved. He was professor of Materia Medica and Therapeutics in Tulane University in 1885 and 1886. In 1888 he reorganized the Texas Medical College, becoming its dean and professor of obstetrics and gynecology. When this college was succeeded by the newly organized Medical Department of the University of Texas in 1891, the regents called him to be its first dean and professor of obstetrics and gynecology. The position of dean he resigned in 1897 to devote all his energies to the expanding importance of his chair. Failing health caused him to resign this chair in 1910, and he became emeritus professor of gynecology and obstetrics until his death.

As a man and citizen his character was exalted, his convictions firm, his conduct ever dignified, courteous, and courageous. He had the highest conception of duty and every position he filled amply exemplified duty well done. As a physician he expressed in his professional life the highest ethical principles and practice. He was elected president of the Texas State Medical Association in 1888.

Soon after coming to Charles Town he became a member of the Tri-County Medical Society of the Eastern Panhandle and a member of the West Virginia State Association.—R. E. V.

During and after the healing of fractures of the shaft of the humerus, the forearm and hand should be examined for wrist-drop and other evidences of musculo-spiral paralysis.—*American Journal of Surgery.*L

Society Proceedings

THE CABEL COUNTY MEDICAL SOCIETY.

HUNTINGTON, W. VA., Oct. 22, 1912.

Editor W. Va. Medical Journal:

The regular monthly meeting of this society was held in the Hotel Frederick, Thursday evening, Oct. 10th.

There was a good attendance and Dr. S. B. Schoolfield, of Charleston, gave a very concise, extremely interesting and practical address on "Gall-bladder Surgery."

Dr. Goff, of Kenova, reported a case of probable pellegra, and Dr. Dunn a case of Hodgkins disease.

After the meeting lunch was served in the cafe.

JAS. R. BLOSS, *Sec'y.*

EASTERN PANHANDLE SOCIETY.

MARTINSBURG, W. VA., Oct. 21, 1912.

Editor W. Va. Medical Journal:

The regular meeting of the Eastern Panhandle Medical Society was held in the parlor of the Hotel Berkeley, September 11, 1912. While the attendance was not so large, much interest was in evidence, and those present took a lively part in the discussion of the different papers read. The following is the program, and it was carried out in its entirety.

Erysipelas—Dr. W. W. Brown, Shenandoah Junction, W. Va. The Use of the Curette in Gynecology, and Obstetrics.

Dr. J. Y. F. Paine, Charles Town, W. Va.

Report of Cases—R. E. Venning, M. D., Charles Town, W. Va.

Report of Delegates to State Medical Meeting—Drs. Banks and Oates.

One address in particular attracted deep interest. It was that delivered by Dr. Paine, who is living a retired life in Charles Town. Dr. Paine, for some years was a professor in the University of Texas, and the association appreciates the able lectures so cheerfully given by him.

P. S.—Since writing the above, it is with sorrow that I announce the death of Dr. J. F. Y. Paine, at his home in Charles Town, W. Va. He will be greatly missed in our county meetings. Further particulars under State News.

Very respectfully,
A. B. EAGLE, *Sec'y.*

LITTLE KANAWHA AND OHIO VALLEY SOCIETY.

PARKERSBURG, W. VA., Oct. 18, 1912.

Dear Editor:

There was no meeting in September of our society. Just prior to the time of meeting our secretary was called away to serve the state with the militia in the mining region on the Kanawha, and is still absent in that capacity. I did not learn of this time to take his duties in hand.

In October we had one meeting, Dr. Price being in the chair. The paper of the evening was read by Dr. M. McNeilen on Pleurisy. It was an interesting and thorough discussion of the subject. Afterwards it was discussed by a number of the members. Dr. Price showed an interesting specimen of a portion of the omentum which had sloughed off after an operation for appendicitis, and came away when the wound opened.

Dr. Sharp related a case of typhoid fever accompanied with pneumonia, where in the third week the range of temperature (taken in the rectum) ran from 96° to 106° for several days. The patient has finally recovered.

Arrangements are being made for one of Mulford's staff to give us a lecture on the bacterial products, &c., illustrated by lantern slides.

Dr. R. Wylie Corbett, of Waverly, was admitted to membership. The matter of the reinstatement of Dr. E. E. Clovis, who was formerly a member of this society was presented. Owing to the records of the society being in the hands of our absent secretary, the matter was postponed until a later meeting, that the matter can be investigated.

On the 14th instant one of our most worthy members departed this life, viz., Dr. C. E. T. Casto, after a short acute illness of liver disease. Our society in a meeting together with those of the profession, non-members of our society, had a meeting and adopted appropriate resolutions on his decease; also resolved to attend his funeral services as a body.

Yours truly,
W. H. SHARP, *Treas.*

OHIO COUNTY SOCIETY.

Oct. 14.—Regular meeting with President Schwinn in the chair. Dr. Wingerter read a paper on "The Visceral Reflexes" (to be printed later). Discussed by Drs. Hall, Hildreth, Noome, Jepson, and Hupp, and the President. Dr. Jepson reported a case of fracture of the greater tuberosity of the humerus from a fall of a man with out-stretched arms. Diagnosis was difficult, and was made accurate by the radiograph taken by Dr. Quimby. The photograph was shown. Dr. Thornton reported a case of patent urachus in a child, the prominent symptom being a very large tumor over the pubes. An X-ray plate, taken by Dr. Quimby, was shown. A large amount of pus was evacuated, with recovery of the patient. Cultures of the pus showed the presence of streptococcus pyogenes albus. Adjourned.

Oct. 21.—Society met; 30 members present. Dr. Reed presented a patient with a mediastinal tumor, and Dr. Quimby showed an X-ray plate of the case. After discussion the diagnosis was given as probably an aneurism of the arch of the aorta. Dr. Hall read a paper on "Observations on Coughs and Colds." It was freely discussed by a number of the members, discussion opened by Drs. L. D. Wilson and Henderson.

Dr. Thornton presented a fetal monstrosity, with accompanying X-ray plate. An immense tumor was present on front of the neck. (We hope to present a full account with pictures in a future issue.—Editor.) J. E. B., *Sec'y.*

Reviews

REPORT FROM THE PATHOLOGICAL DEPARTMENT AND THE DEPARTMENT OF CLINICAL PSYCHIATRY.—Central Indiana Hospital for the Insane. Vol. IV. 1909-1910 and 1910-1911.

If every hospital for the insane in the United States would do work of the character indicated in this report and publish the results of that work in the ideal fashion here presented, there would be most wonderful advances made in American psychiatry within a short time. The clinical study of the cases under the care of Drs. Edenharter and his clinical psychiater, Dr. Bahr leaves nothing to ask for, and the crowning and confirmation of this clinical labor in the pathological room rounds out the report in fitting manner. This report is a beacon-light and a splendid example for all workers in this field. West Virginia physicians should not rest until our own state institutions are showing evidences of such truly scientific results as are here embodied. The benefit to the people of the state would be incalculable. To make such possible, however, the first step must be taken by the practitioners throughout the state. That first step consists in the realization of the great truth that what is important in the care and study and treatment of the insane is a knowledge of the life history of the patient. Under present conditions the patient is sent to the institution authorities with nothing but a cross-section of the mental state to guide them. The commitment papers tell nothing but what the staff can discover for themselves after the same brief sort of examination that has preceded the commitment. What is desirable is a "lognitudinal section of the mental condition," and it is practically impossible to obtain this from the patient. If it is to be furnished at all it must come from the committing physician, who in turn will rely upon the family and acquaintances of

the patient. Here lies our duty to the patient, the asylum authorities and the public. If we will awake to our plain duty in this respect a proper incentive will be given that will surely eventuate in such reports being prepared as this now under review. Prepared and presented to the State Board of Control, their publication would inevitably follow, since the value of such a report as this is apparent even to any educated layman.

C. A. W.

COLLECTED PAPERS BY THE STAFF OF ST. MARY'S HOSPITAL (MAYO CLINIC) FOR 1911.—Octavo of 603 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $5.00 net.

One opens with much interest this 1911 volume and is pleased to find the rich fund of information contained in these pages. The chapters on Surgical Diseases of the Alimentary Canal will prove of particular interest to the general practitioner as well as the surgeon. One rarely finds a work dealing with surgical conditions in which the pathology and diagnosis plays so large a part. In defending the operation for gastric and duodenal ulcers it is shown that the average duration of the symptoms before operating has been more than twelve years. Ninety per cent of gastric ulcers occur in the lesser curvature, and ulcers not along the lesser curvature are more frequently found in the posterior than the anterior wall. In Dr. Mayo's opinion few cases of chronic ulcer are cured other than by operation. The average size of the ulcer is about that of a lead pencil. Not over 30% of the cases give a history of hemorrhage of the stomach.

In cancer of the stomach a strong plea for early diagnosis is made and the difficulties attending this problem are carefully considered. The statement is made that "waiting for the diagnosis to be established carries with it the prognosis and the case becomes one for the undertaker and not the surgeon." There are no symptoms referable to the stomach itself upon which to base an early diagnosis. The only chance offered the patient is early operation. The large number of patients with this disease coming annually to these clinics and the complete records that are kept of the cases are a distinct benefit to the profession, and should go a long way toward clearing up the mystery that has so long hung over diseases of the intestinal tract.

Practically no change is made in the technique of the operation of amputation of the breast. Extensive dissection of the superficial and deep fascias, beginning above the axillary structures, and removing the pectoral muscles and axillary fascia, including part of the fascia of the rectus muscle, is advocated.

In a short article on surgical technique the iodin method of skin sterilization is advocated, equal parts of tinct. iodine and alcohol being used for the purpose. Diseases of the kidneys and genito-urinary tract are considered from a diagnostic as well as a surgical standpoint, and one chapter is devoted to X-ray examinations of the kidney and ureter.

The illustrations are numerous and well executed, and clearly depict the points to be brought out. In reading this book one is impressed with the fact that it is a valuable contribution to medical literature and a distinct help to the surgeon and internist.—VENNING.

A TEXT-BOOK OF OBSTETRICS: INCLUDING RELATED GYNECOLOGIC OPERATIONS.—By BARTON COOKE HIRST, M.D., Professor of Obstetrics in the University Pennsylvania. Seventh Revised Edition. Octavo of 1013 pages, with 895 illustrations, 53 of them in color. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $5.00 net; Half Morocco, $6.50 net.

The JOURNAL having given a very favorable review of the last edition of this work, it will not now be necessary to give a very full review. The work shows a wide field of personal experience which covers not only all of the ordinary cases that one often encounters, but also many rare and interesting cases. Its unusually full index makes it a very easy and practical reference book for practical workers.

Many new and splendid illustrations have been added as well as additions to the text, making it one of the latest and very best books in the market. Much of the matter has been rearranged, condensed and rewritten. No one can make a mistake who purchases this book, which, in addition to being a treatise in Obstetrics proper, contains much material dealing with the gynecological diseases that result from parturition.

H. R. F.

INTERNATIONAL CLINICS—A quarterly of Illustrated Clinical Lectures, etc. Vol. III, 22nd Series 1912. J. B. Lippincott Company. $2.50.

The books of this series are all valuable, and each one contains some article of special interest. In this volume are two papers on Sex Determination. Deaver has a report of a Year's Work in Appendicitis, Carmichael of Edinburgh has a paper on "The Acute Abdomen" in Children, touching on tuberculosis affections, generalized peritonitis, etc. Epileptic Masks and the Differential Diagnosis of Epilepsy by Sup't Shanahan of the N. Y. Colony for Epilepsy is of very great general interest, as is the paper on Adult Flat-Foot by Dr. Stern, Orthopedic Surgeon to Mt. Sinai Hospital, N. Y. The book is well illustrated and fully up to the previous volumes of the series.

HERSELF—With talks with women concerning themselves. By DR. E. B. LOWRY, Chicago, Forbes & Company. Price $1.00. This is one of a series of books on sex hygiene by the same author, some of which we have noticed in the JOURNAL recently. It is addressed to women, young and older, and is an attempt to convey useful information concerning the sex organs, their use and abuses, and their proper care. The language is chaste, the advice given is sound, the book altogether ethical, and it can be safely placed in the hands of any mother or young lady of education and refinement. We are thoroughly convinced that our girls are permitted to grow to maturity in too great ignorance of sex matters. This book can be commended as a safe guide.

THE BLOOD OF THE FATHERS—A play in four acts. By DR. G. FRANK LYDSTON.

The American medical profession needs no introduction to the author, who has published several books before this one. He is a graceful writer,. and this book is full of interest. It is intended as an illustration of the influence of heredity, the heroine being the daughter of a degenerate father, and although cultured and refined, she was unable to overcome the hereditary influence. The hero is a young physician of brilliant parts, mismated through the power of the love passion, which the author thinks is not a safe guide to marriage. The tendency of the book is to make the young more careful in the selection of a life companion. The Riverton Press, Chicago, $1.00.

THE SURGICAL CLINICS of John B. Murphy, M.D., at Mercy Hospital, Chicago. This is Vol. I, No. 5 of the now well-known Murphy Clinics. It maintains the high character already established by former issues. This volume opens with a discussion of Anesthetics by the distinguished author and clinician, Murphy. Among the other interesting chapters in this volume may be mentioned Nephrolithiasis, Gastroduodenal Ulcer. Colonic Adhesions Simulating Appendicitis, Exophthalmic Goiter, Ununited Fracture. In addition to these very valuable chapters are a number of others of interest. It is surprising that so much of value can emanate from one man.

Medical Outlook

COLONIC IRRIGATION IN TEDIOUS LABOR.

Dr. Kate Wilde of Los Angeles says: "At the 'Door of Hope' for the past year I have aimed to shorten the labors of primiparae during the stage of cervical dilatation. The return flow colon tube inserted in the rectum prior to and during labor, at short intervals if necessary, passes from quarts to gallons of warm normal salt solution through the rectum and returns same. The cervix relaxes and dilates gently, easily and rapidly under the above treatment."—*Southern California Practitioner.*

USE AND ABUSE OF THE LIGAMENTUM TERES UTERI.

1. Close observance of Nature's laws and methods is essential to success.

2. The resistance of the pelvic outlet determines the degree of pelvic ptosis. The levator ani and triangular ligament are prime factors in perineal support. A relaxed perineum destroys the value of atmospheric pressure and permits unimpeded action of intra-abdominal pressure on prolapsed pelvic viscera.

3. The uterus, normally, is one of the most movable visceral organs. Any direct fixation of the fundus is unnatural and not productive of good results. The round ligaments functionate only as guy ropes, and should not be compelled to act as suspensory ligaments.

4. All repair of uterine displacements must be directed primarily toward the removal of the cause and the readjustment of the pelvic floor and ligamentous attachments as near as possible to their normal relations.—F. W. Bailey in *Inter-State Medical Journal.*

DONT'S IN THE TREATMENT OF A WEAK HEART.

Don't allow a patient with an uncompensated valve lesion to be out of bed. Don't let a child or young person with chronic valve disease get out of bed until compensation has returned to the heart, and circulatory equilibrium has been maintained for at least one month. Don't keep elderly patients with myocardial degeneration in bed longer than is absolutely necessary to secure adequate compensation. Don't give children digitalis unless there is absolute indication for its use. Don't ever give digitalis to old people as a routine measure. Don't give digitalis to a patient with fatty heart, or with any form of pronounced chronic myocardial degeneration. Don't persist in giving digitalis in chronic valvular disease if the symptoms are rendered worse by its use. Don't start in with digitalis in mitral stenosis. Don't forget that digitalis, strophanthus, strychnin and caffein are the most effective heart stimulants, and that nearly everything in the line of heart stimulation can be accomplished by chemicals if they are correctly exhibited. Don't use nitroglycerin in cardiovascular disease to reduce blood pressure if the kidneys are much sclerosed, but do not fail to use it freely if coronary sclerosis is present. Don't forget that individual susceptibility to strychnin varies greatly and that it is not generally safe to begin with more than 1-60 grain every four hours; and that the maximum dose in diseases of the heart is generally not more than 1-30 grain every four hours. Don't prescribe passive movements as part of the treatment without watching very carefully to see that they are not given too vigorously. Don't expect to get compensation in a bad case too soon; be satisfied if the patient shows slight improvement immediately; permanent improvement must be slow if it comes at all, and attempts to hurry it unduly may prematurely exhaust the heart.—*Medical Review of Reviews.*

NEW REMEDY FOR CANCER.

Dr. H. W. CATTELL writes from Europe to *The Medical Council* as follows:

The X-rays and the emanations from radium, thorium and other like substances would be much more effective in the treatment of cancer were they capable of being brought into direct contact with the epithelial cells, in whose destruction they so markedly aid. Professor Werner, working at Heidelberg with Professor Czerny, announced, on July 5th, as the result of his investigations, that it is the lecithin normally to be found in the body that is acted upon by these various forms of radiant energy, with the result that choine is produced in its tissues, and that it is this latter substance which produces the retrograde changes in the cancerous cells which are so productive of good in the one having the tumor.

Fifty-six patients have already been treated by a stable and non-irritating preparation of choine made by a Berlin chemist, but, as in the case of "606," this material will be first supplied to a few favored clinicians for further trial before being sold to the profession at large. This preparation is said to act through the blood stream as well as

when injected into the neighborhood of the tumor itself. In animals large tumors disappear under its use. In man sufficient time has not elapsed, other than to note the fact that the treatment has a most beneficial effect in retarding the growth of a cancerous growth and in causing it to diminish in size.

THE GENERAL PRACTITIONER.

Dr. C. Johnson, in *The Journal-Lancet*, makes the following remarks: "In private practice the object is to relieve the patient as quickly, safely and pleasantly as possible. That is what the patient employs the doctor for. Here is Johnnie with fever, vomiting, pain in his abdomen. It is immaterial whether the doctor is a linguist, an orator or a mathematician or how many titles he has, but he must be able to decide whether Johnnie has plum pudding colic or appendicitis, and he must be honest enough not to make a diagnosis of appendicitis just because an operation fee can be got that way, and Johnnie's father would never be wiser. Honesty, learning, medical instinct are the tripod on which a medical career rests. A man who lacks any one of these cannot be a competent medical adviser and practitioner, but a large degree of one of the elements will to a certain extent compensate for a less degree of either of the others."

We would take exception to the latter clause. How can a large degree of honesty make up for a lack of learning and medical instinct? Besides, there are no degrees of honesty; a man is either honest or dishonest, and that is the end of it.—G. D. L.

MEDICAL FEES.

An old story has it that once on a time a man called at the home of a physician in a small country town and asked him how much he would charge to go to a point five miles in the country. On receiving the reply that the fee would be $2.50, he told the physician all right, but to be in a hurry. The physician hastily dressed, hitched his horse and, taking the man in the buggy, drove in a lope the entire five miles. On arriving at their destination the man paid the physician the $2.50, informing him that no one was sick and that the liveryman would have charged $5 and would not have made such good time. The truth of the point of the story is driven home when we remember that we will drive across town and administer to the sick cheaper than a taxicab company would send a car with a $7 a week chauffeur.—J. C. AYRES in *Memphis Medical Journal.*

Miscellany

PREGNANCY AND LABOR OF ONE OF THE BALZEK TWINS.

There live in Prague twin sisters, known as the "Siamese twins," who are united to each other by a solid bridge of tissue, with some cartilage and bone enclosed, in the region of the hip-joint and the brim of the iliac bone. Several attempts at separation have been suggested, but refused by the twins because they desired to exhibit themselves for money. One of the twins suffered a few years ago from chole-lithiasis and had to be operated on in the surgical clinic of Prague, where examination revealed that apart from the malformation of the connecting iliac bone the two persons have separate and independent bodily functions. Some time ago the twins, now 36 years of age, again came to the clinic, as the former patient again suffered from colicky pains. The surgeon made a diagnosis of incipient labor. Although that possibility was absolutely denied by the girls, the patient soon gave birth to a healthy boy, and later, after repeated questioning, confessed. The other sister felt nothing at all of the pain of the mother so closely united to her, and when the next day the temperature of the mother went up two degrees the temperature of the other twin remained normal, showing the absolute separation of the two organisms as regards function and metabolism.

WE MAKE HOUSEHOLD PETS OF THEM IN AMERICA.

GENEVA, March 6.—"Doctor" Joseph Unterberger, a Christian Scientist, advertising himself as a "natural healer of all diseases," has been tried at the court of Canton of Appenzell for causing the death of a woman "by lack of medical knowledge and neglect" and sentenced to a year's hard labor and costs. He is expelled from the canton and is prohibited from exercising his "profession" in Switzerland.—*Telegraphic News, New York Times, March 7, 1912.*

PRECOCIOUS PARENTAGE.

The *London Lancet* of October 1, 1910, presents a picture of a father, mother and infant of the province of Shansi, China. The mother is seven years old and the father eight years. This is the world's limit, so far as has been reported.

MAN'S DAYS.

Neither Greek nor Latin, nor even ancient Hebrew, has written a more poignant summary of the allotted three-score-and-ten than is contained in the little poem, "Man's Days," by Eden Phillpots:

A sudden wakin', a sudden weepin';
A li'l suckin', a li'l sleepin';
A cheel's full joys an' a cheel's full sorrows,
Wi' a power o' faith in gert tomorrows.

Young blood red hot an' the love of a maid;
Wan glorious hour as'll never fade:
Some shadows, some sunshine, some triumphs, some tears;
An' a gatherin' weight o' the flyin' years.

Then auld man's talk o' the days behind 'e;
Your darter's youngest darter to mind 'e;
A li'l dreamin', a li'l dyin',
A li'l low corner o' airth to lie in.

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Original Articles

NERVOUSNESS IN CHILDREN; HOW TO PREVENT IT.

By Tom A. Williams, M.B., C.M., Edin., Washington, D. C.

Corresp. Memb. Socs. of Neurol. and Psychol., Paris.

It is by means of the nervous system that man not only regulates his bodily nutrition and activity but by it comes in contact with his physical environment and his fellow-beings. Hence any disorder of this machinery is shown in his conduct with relation to his surroundings.

What more important task than to prevent those disorders? Now many of these arise from within from some defect in the apparatus. Perhaps it is of poor quality, perhaps a portion has been destroyed, perhaps it is poorly nourished. Such defects are either irremediable or are problems for medicine strictly speaking. I shall not speak of them here and now.

But there are other disorders of smooth functioning of the nerves fostered by bad management and imposed from without upon the individual, helpless in his ignorance of his own being and its relation to the world, what he is and where he stands and what he should do.

In the vastly significant drama of Lengyel, Typhon, recently translated and played in Paris the Japanese hero is made to animadvert upon the helplessness and lack of motive in our Modern Western world. "There people are filled with vast energy which is stirring blindly and ineffectually without motive or end. The world must bow to the scientific who know where they are and what they want."

It is to help to substitute for our former attitude of incompetence and empirical muddle a scientific conception of our duties towards children in preventing the nervous derangements which arise from bad management that I am asked to come before you now as a cog in the great wheel of preventive medicine which has begun to turn in order to save our civilization from reproach and failure.

Nervousness. Others will speak of the physical causes, e.g,, teeth, adenoids, dyspepsia, anaemia, etc., which provoke inadequate action of the nervous system.

But before proceeding let us reprehend the fallacy of universality by magical cures, surgery of the cranium and such like wonderwork which newspapers lead us to look for. I feel that they misrepresent the judge of our juvenile court in saying that he believes in curing an incorrigible boy in this naive way, although a boy occupied by a sore head has no inclination for mischief and a boy stupefied by narcotics has no will for it.

But nature knows no magic.

Both prevention and cure are the work of insight and patience and intelligence. There is no royal road.

It needs intellectual labor, and those who cannot give it must either leave their children derelict or adopt as best they may the poor substitute of rules of guidance and conduct for their young people. These may possess the letter of truth but lack

always its spirit until read into them by sympathy. They are sometimes better than nothing at all, at least for the thoughtless; but hardly consist with successful democracy, which demands intelligence to apply in its management, of which the management of its growing citizens is the prime necessity.

The psychological types which tend towards future nervousness may be conveniently divided into five.

I. *Inertia.* The indolent or inert habits of the child in whom the body feeds on the mentality* or avoids numerous occasions of psychological effort, practice in which is essential for successful adaptation when the protection of the family ceases. When need or the arousal of conscience stimulates the lethargic psyche of a young person of this type, the mastery of life's rudiments becomes a tremendous load which may break down the psychic equilibrium, producing what is colloquially termed a nervous breakdown.

The development of this intellectual lethargy is largely contributed to by the widely current fear of overloading the childish brain, which emanates from the false doctrine concerning its fragility. As a matter of fact, the brain never works more actively than in childhood. The acquisition of language alone is a colossal feat; and the fresh adaptations to environment which are demanded every few minutes of a child in the ordinary family life would be a tax on the strongest man; and yet a child suffers them gladly; and, indeed, demands employment of his activities. In the "Psychology of Intellectual Precocity" (Pedagogical Seminary, May, 1911) I have discussed the favorable effects of ordered psychological activity upon mental health; so I need not recapitulate. Suffice it to say, that it is most pernicious to discourage the psychic activity of a child. The parent's duty is to guide it into channels which foster satisfactions of a more permanent kind than the fatuities into which they are usually allowed to drift.*

The prevention of this danger to psychic health is obvious enough, not to require setting forth.

II. *Overintensity.* The antithisis of the preceding type is the child of resistless and excessive neuro-muscular energy. This quality is of course a desirable one, provided that it is not stimulated by ambitions and enthusiasms to interfere with nutrition or sleep, and is not perverted into a craving for activity for its own make.

In order to prevent these dangers, parents must insist upon the prime need of food and rest; and the child must be taught to inhibit for short periods the hyperactivity which may in part proceed from habit.

Such persons, when grown up, are apt to be proud of their "overintensity." It is necessary to teach them the folly of this attitude, and that the man who runs till he drops is a fool for his pains, and does far less work in the end than he who works steadily.

III. *Psychasthenia.* When the natural intellectual activity of the child is restrained, more especially when its initiative is prevented proper play, the over-inhibition of spontaneity which ensues gives rise to grave danger of the development of a psychic trend which has been called by Janet psychasthenia.

In this condition, a feeling of insufficiency breeds

(1) morbid fears and their moral distresses,

(2) intellectual ruminations and

(3) a motor fatuity taking the form either of a general restlessness or a specific unrest known as tic. *See "Tic in Children." *Pediatrics*, Oct. 1910. This represents the morbid reaction to a particular discomfort at the relief of which it is aimed. The tendency to scratch an itching scar illustrates a mechanism with which everyone is thus essentially familiar.

CASE I. I have recently cured a case of a girl of eight, who for four years had been impelled by the craving to scratch her nares

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*Shakespeare's wisdom makes Fernando say:

"Fat paunches make lean plates, and dainty bits make fat the ribs and bankrupt quite the wits."—*Love's Labours Lost.*

*See author's discourse before Amer. Nat'l Mother's Congress and published in Trans. Va. Conf. of Charities and Corrections, 1911-1912.

to the bleeding point; so that she was waxy in appearance from anaemia.

A child aged two would scratch its wrist almost down to the tendons. This case, which I described to the Paris Society of Psychology and published in the "Archives of Paediatrics", was caused by the psychic inadequacy produced by the intoxication of coffee given the child since the age of three months. The former case was possibly due to a complex psychological mechanism the origin of which I did not discover. But I believe it was simple.

The followers of Freud would attribute it to the demands for titillation of an orifice which in essence are sexual in nature. I can only subscribe to this hypothesis in so far as to admit that an organic satisfaction is provided by the manoeuver. The discomfort of craving has many avenues of removal. A classic case is the young girl of Janet's who poured drops of boiling water upon her naked foot to stimulate herself out of the low spirits into which she frequently fell.

The plain mechanism of fear of bodily harm from without seems to be a much more fundamental feeling, if one is to appeal to phylogeny, than is that concerning the relations with others termed sexual.

Even hedonic effects occurring autochthonously in childhood, although of the same genus as that which later effloresces into sexual emotivity, do not by any means in themselves give origin to perturbations of the psyche either in childhood or later. I say in themselves, for I believe that the perverted affectivity from which arise so many obsessions, phobias, etc., is always the product of induction, if not directly and naively from without, at least by logical induction from data acquired by observation or didaction of the conventions of family and social life. The child's avidity to relate himself correctly to these, to behave as a grown up, that being of marvellous privileges, is not sufficiently realised. It makes him seize upon the most trifling detail for imitation. One of his objects is to transcend the amusement he provokes in trying. The shame he feels at the ridicule with which his attempts are so often met causes him to keep them to himself in half shame.

CASE II. Thus in a case of which the analysis occupied over a year and would accordingly take too long to recount, the obsessions, which were mainly sexual scruples fundamentally, had as their basis the moral and religious repressions of the patient's childhood. It was the horror and loathing of everything pertaining to the corporal which caused the child when aged six years to look upon a hedonic state which used then to occur as a sinful one, which prevented even speaking of it to the mother, and which was the incentive for the repression of indulgences demanded by a most affectionate nature, for in the family all display of affection was discountenanced. and intellectual inquiry was discouraged It was the lurking fear of that which was awful, because unfaced and vague, but which contained inexplicable potentialities for evil, which later permeated the patient's relations with fellow-beings to a degree which produced utter incapacity for daily life until cured by me.

CASE III. *Prepuberal Impulsions.* Let me ask you to contrast on the one hand the loss of a quarter of a century of fruitful activity by this patient, the lack of good sense in whose upbringing was so late compensated for by what we have learned of psychopathology, with the immediate compensation of an entirely similar syndrome in a clergyman's child, aged ten years, whom I saw recently. One day she would be well and the next crying, feeling miserable, tired, and dizzy, with a dull headache as a result of lying in bed thinking. The preceding summer at school she had been irritable, cross, impatient, and quarrelsome with her sister. She had formerly been easy to manage and full of life and joy. Her mother was most anxious, and took pains to avoid startling or fatiguing her, and in the belief that it exhausted the child forbade the impulsive squeezing and kissing which the child frequently desired. She had noticed that the little girl was less impulsive and irritable when having something to do; but she had been taken from school, which seemed to aggravate her nervousness.

The physical examination was negative, with the exception of a slight hyperopic astigmia and a variable visual acuity without apparent cause (Dr. F. N. Chisholm, who referred her).

Psychically intelligence was normal. She was timid, hyperconscientious, and much

concerned at having been reproved for impulsive shouting, for violent hugging of her parents, and because of some eau de cologne she took. This had really been taken by the little sister, who was punished for it. She was sometimes so unhappy and miserable that she did not want other children near her, and she was most unhappy because she was not allowed to show her affection to her father and mother, of whom she is very fond, more especially of the latter. Her dreams are rare, but she recollected one of a white-bearded man who dragged her from the bed by her hair and another of a wild animal trying to eat her. I could not at the time obtain any associations from either of these, and, indeed, I was more concerned about relieving without delay the intensity of the repressions which made the child's life a burden.

A physical factor complicated the case, the child eating excessively of meats and oatmeal, and making her principal meal at night. I believed this was the initial cause of the irritability of temper and the impulsiveness which led the overconscientious parents to repress overmuch.

Treatment. Mid-day dinner was prescribed, and a supper mainly of carbohydrates and fruit, after which she should not go to bed for at least an hour. On waking in the morning the child was instructed to make a practice of getting up and going outside instead of ruminating in bed. The parents were told to avoid nagging her about trifles, and her behavior was to be left to take care of itself at present. Her affections were to be indulged and reciprocated; she must be given plenty to do, and was sent back to school in a few days. This policy resulted in complete recovery within two weeks, the child being as happy and joyous as she formerly was, now one year later.

Diagnosis. I considered this a prepuberal emotionalism attributable to an incorrect dietary and greatly aggravated by parental interference, well meant but entirely injudicious. This last, the psychogenetic factor of the situation, was the main pathogen of a state which might have eventually attained a gravity like that of the case with which it contrasts.

Thus the psychasthenia of this little girl was cut short long before its root branched into mental manias or before there was a hint of obsessions or phobias. It may astonish one that I include this case in the psychasthenia of Janet, as it is without the stigmata or cardinal symptoms of that disorder, if we except the impulsiveness and the inadequacy which were hardly even conscious. The justification of such a diagnosis need not, however, detain us, for it has been set forth in explanation of the case of the child, aged only two years, which I reported to the Psychological Society of Paris in 1912. (See also Arch. of Pediat., 1910.)

CASE IV. *A Symptom which is Usually Psychogenetic is Stammering.* Thus the ten-year-old son of a Washington attorney was referred in November, 1910, by Dr. Spiller of Philadelphia for advice regarding a stammer of two years' duration and for general nervousness.

A brother at the same age who had formerly stammered had recovered after six months spontaneously, but the expectations of the parents that this boy's stammer also would disappear were not fulfilled.

He stammered worse when tired or when intent upon speaking correctly. In play, he rarely stammered, and a sentence was never interrupted by a stammer. The boy was fidgety, especially on speaking; but his writing was not jerky. His attention was easily tired. He was not over studious. He did not tremble. He was not constipated. He detected differences of pitch.

His chest was contracted in front, and measured during quiet speaking 23½ inches, expanding to 24½ inches. By forced inspiration it could reach 29¼ inches. In singing he expanded to 27¼ inches. The scaphoid scapula was not present.

I omit the detailed psychic examination for brevity's sake. But in short, the cause of the stammer was a very common one, the dread lest he should stammer, added to or supplemented by an insufficient preliminary inspiration. The attempt to force the voice to overcome these difficulties only added to the glottic spasm and the contortion of the muscles of forced expiration due to his apprehension.

A series of exercises in control led to his recovery in a few months.

Now, the treatment of this boy suc-

ceeded only in virtue of the taking into due account the psychogenetic factor in the production of the stammer; and while that was attended to the boy remained well for several months. Later, when this was neglected, a relapse occurred a few months ago.

The support craved for when inadequacy is felt is sometimes procured by procedures more intellectual in aspect. Thus to count in series (arithmomania), or to associate artificially certain events, to symbolize, to be absurdly neat or painfully accurate, to want ultimate explanations of the universe, presages (*manie du sort*) are frequent methods of relieving an unpleasant situation, whether autochthonous or provoked from without. The day dream is a frequent defense against a felt inadequacy.

The motor methods to relieve are manifold. Thus a girl of eight used to smack her lips as a symbol of a healing kiss against the noxiousness to others of her carbon dioxide laden breath.*

Causes. The sense of inadequacy so characteristic of the psychasthenic patient is a product of undue repression of children by elders. This is the cause of the hyperconscientiousness so often seen in New England. A morbid sentimentality and desire for soothing and sympathy is one of the forms it may take. The inefficiency to which this leads is well shown in Henry Mackenzie's "Man of Feeling," and in the *"Journal Intime"* of Amiel. Self pity and gloating over one's own misery may follow. From this to ideas of unworthiness and delusion of persecution is not a far cry. Hypersensitiveness in conjunction with pride is food for future paranoia; for they will preclude the collisions of daily life which prevent shutting the child's mental life into itself and the breeding of a set of ideas which contort the universe into a fancied conspiracy against a martyred unfortunate.

The *prophylaxis* against this unhappy psychosis is the obvious and simple securing for children opportunity for psychological activity, and the withholding from them of the fear-producing aspect of religion and story, and of the weakening of their fibre by undue petting and babying.

The removal of mystery by truthful and clear explanations and the making light of those facts too complex for a child's understanding are principles to be insisted upon and carried out by the parents. The promotion of spontaneity in activity is well secured by games. These are particularly important for girls. It is a crime against childhood to inculcate the prohibitions to which so many young girls are subjected. Tenderness should be avoided and young ladyhood should be postponed until growth is complete. Even more essential is active exercise for free psychological development than for bodily strength.

Another most reprehensible practice is the prudish restraint with which the sexual function is treated between parents and children.

Many a child's life is made miserable by the mystery and shame surrounding this function. I see many such cases, both in men and women, whose psychic happiness has been destroyed for years by unnecessary scruples arising from the terror bred by an ignorance for which parents are culpable.

Hysteria. V. Just as inimical to psychologic health as is unwise repression is the utter lack of restraint in which some children are indulged.

This breeds the happy-go-lucky irresponsible character, in whom a quite different form of nervous derangement is almost inevitable. Such children are unpractised in inhibition. They are the prey of impulsions. These are generally induced with great facility by ideas implanted, often by a companion or sometimes derived from some event of an impressive character. These are the people who become the victims of the psychic contagion of the crowd, who stampede at a fire, who makes the pilgrimage in search of health led by the dictates of fashion, whether in the guise of religion or merely as a form of snobbery. It is these people who so readily imagine themselves diseased, and who are so readily freed from their ailments (for a time at least, until they fall again victims to the suggestions around them) by Christian Scientists and other suggestioners or charlatans, including some in our own profession I regret to confess.

This type of nervous susceptibility constitutes hysteria as defined by Babinski.

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*See "Juvenile Psychasthenia," *Am. Jour. Med. Sci.*, Dec., 1912.

Undue suggestibility is its criterion. The tendency to it is pre-eminent in young children, as well as the big children which many adults remain, especially in the lower races, where credulity and ignorance foster susceptibility to the reception of suggested ideas, however absurd. From this, however, no social stratum is immune yet, even in our western civilization. Indeed many of the wealthy and high placed are, where health is concerned, the victims of ideas as naive as those of the veriest savage. There is a class of physicians, alas, who do nothing to counteract the ignorance from which springs this credulous suggestibility. "It is so much easier to manage the patient who does not know so much," many a fashionable doctor will say, forgetting his responsibility for a state of mind which has permitted Christian Science to flourish.

I describe a typical case which also illustrates the mode of treatment to be followed, and for which the prophylaxis is readily seen.

CASE VI. *Hysterical Phobia in a Child. The Principles of the Treatment and Prevention of the Attacks.* A boy of eight was seen with Dr. A. R. Tynes, at Staunton, Va., in the autumn of 1911. The preceding May he had developed what his parents called hallucinations, which occurred when he was alone only, for he would go errands and play about if he knew he was in sight of anyone at all. There were no night terrors, although he feared going to bed alone, and his mother or father always accompanied him upstairs. Whenever he was alone a spell would occur. The hallucinations were accompanied by a loud cry and a twisting backwards of the neck and contortions of the body. He was rarely still, wriggling about nearly all the time in an excitable fashion. His father and maternal uncle are declared to have had similar attacks in childhood. But it could not be ascertained that the parents had not spoken of some of these before the boy. The mother was over-anxious, "hysterical," and very uneasy when the boy was out of her sight, of which the boy was well aware.

Examination revealed no physical signs of disease of the nervous or any other system. In anamnesis, I found him a sensible little fellow, and I ascertained that it was a snake which he usually saw, although sometimes a wild beast would be seen. His shout was really the name of the animal he saw. He could not describe the snake except to say its head was like an eel. He remembered well the first such occasion of fright, and the creature then was not a snake, but a rooster. He declared that he was never actually afraid of any animals. Indeed, on one occasion, wearing a red sweater, he chased a bull away with stones. On another occasion, he went into the cellar to look for the bogeyman. He said that his only fear was that of being whipped by his father when he was naughty, and that of this he was "not very frightened."

I could not, in the short time at my disposal, penetrate the psychogenesis completely. My questions soon showed that the hallucinations were not true ones; for when I asked the boy if when he looked around there was really an animal jumping on his shoulders, he had to reply "no"; and that he never actually saw, heard or felt what he feared. He then spontaneously declared "I reckon my imagination gets away with me." I then asked him "Why do you look around each time you fear the animal behind you?" He said, "It does not give me time to think of it; it comes so quickly sometimes, and I shout and run before I can recover myself." When asked, however, he said he was not easily startled as a rule.

Diagnosis and Prognosis. Familiarity with the mechanism of terrors of children enables one to interpret this boy's case as a phobia against being alone, produced by the foolish anxiety of his mother. The affective state was an induced one, therefore, produced by the idea of some "dreadful consequences" which might occur to a little boy when not protected by his elders. But the morbid reaction had become a habit, so that even though the initial cause were suppressed, training would be required to overcome the facile inductibility of the terrors. Inhibition of his undue impulsivity should also be undertaken.

Treatment. Accordingly, the following procedures were outlined, and the reason for them clearly explained to the boy and his father. Firstly, he must gradually accustom himself to go out alone, first for half a block, then for a whole block, and finally around the corner. While doing this,

he could hold himself in hand, his attention fully awake to the need of manly behavior and the importance of recovering from his timidity. Secondly, he must learn to go to sleep without any one else in the room, remembering what a nuisance is a boy who cannot forego keeping one of his parents constantly at home in the evening. Thirdly, he was shown exercises in slow movement and mobilization by which he could suppress the wriggling tendencies of his limbs and body. His mother should be dealt with rationally, too.

Wishing to obtain more precision as to the psychic mechanism, wrote to the boy asking him to tell me whether he seemed to be in a dream-like or in an absent condition when the fears assailed him. I also, of course, wished to stimulate the practice of the re-educative procedures I had prescribed. The following reply was made, and I recently heard from Dr. Tynes that the boy remains well:

"Dear Doctor: I have your letter. I do not see any animals since I saw you. I never did hear or feel them, but used to see them. It is not like a dream. I hope I can soon write you I am well. Your little friend."

I heard from the father of the little boy that he undresses and goes to bed alone, and is getting a good hold over himself.

The Diagnosis of Hysteria. The mode of treatment of which the case is an example must be founded upon an accurate diagnosis, more especially where organic or functional disease is present in addition to hysteria. Indiscriminate use of persuasion, however rational, will bring only discredit to the physician who employs it. The most careful discrimination is required in some cases to differentiate that portion of a syndrome which is psychogenic. And where organic disease of the nervous system is what is simulated, an exact and wide knowledge of neurological signs is essential for a correct diagnosis. For, although hysteria may resemble apparently closely the condition produced by an organic or functional disease, differences always exist, which can be detached, however, only by one versed in minutiæ of clinical neurology. For certain aspects of these, reference may be made to the writings of Babinski and his followers, and to the author's Nature of Hysteria, International Clinics, 1908; Simulation of Hysteria, Amer. Jour. Insanity, 1910; Reflexes in Hysteria, Month, Cyclo., 1910; Essential Differences of Hysteria and Psychasthenia, New Orleans, Med. Jour., 1909; Hysteria and Pseudo-Hysteria, Amer. Jour. Med. Sci., 1910, etc.

These patients are much easier to deal with than are the psychasthenics, requiring less psychological finesse and insight. But they require perhaps more perseverence on the part of physician or parent, because they are less analytic and need more outside help in controlling their impulsiveness and in cultivating the inhibition they lack.

VII. *Querulousness and Ill Temper.* Lack of inhibition may predominate regarding the reaction to unpleasant stimuli and situations through the natural violence of the infant temper not becoming attenuated by the exigencies of social life. Persons of this tendency may become so intolerable as to require incarceration to prevent them from being a danger to their friends.

In addition to a congenital predisposition, perhaps due to endocranial instability or excessive irritability of one or more glands, I believe that many of these cases are permitted, if not caused, by unwise indulgence of infantile tantrums by those responsible for the child's care.

No one who observes babies intelligently can fail to be struck by the great facility with which their emotional reactions can be diminished or increased according to the treatment meted out to them during pleasant and unpleasant experiences. Now self-control, so easily taught in infancy, is an arduous task for a child, even as early as at eight years of age; and when puberty is attained, it requires powerful motives, as well as tremendous determination to conquer violence of temper which would not have been difficult to subdue in babyhood by a careful and wise mother.

We are now fringing on forms of psychological reaction comprising disorder of what is termed morality. The same principle of prophylaxis applies to them all. Not only tendency to violence of disposition, but the antisocial habits of lying, thieving, back-biting, envy, all of which may become morbid impulsions, are most readily induced, best guarded against and most easily treated in early childhood.

Thus the prevention of psychogenetic disorders is only to be accomplished by a study of psychological principles, and their wise application to concrete situations arising in the home and the school.

The labor and intelligence needed in the acquisition and application of these is not too great a price to pay for the conservation of the greatest asset of a nation, the *potential men and women*—its children.

1705 N St., N. W.

GOITER OPERATIONS AND LOCAL ANAESTHESIA.

By W. D. Hamilton, M.D., Columbus, O.

The physiology and pathology of the thyroid gland have been given a great deal of study within the last decade. The views expressed by Melzer, evidently predicated largely upon modern experimental medicine, make the following points:

MYXEDEMA.

(1) The thyroids are of fundamental importance to life and health.

(2) A new disease has been established. The "natural" atrophy of the thyroid gland in adult life leads to myxedema.

(3) The real nature of the well known disease recognized as cretinism is infantile myxedema.

(4) Complete removal of goitrous thyroids during infancy leads to cretinism. and their removal during adult life may bring on either myxedematous cachexia or tetany.

(5) Surgeons have learned two important lessons—on the one hand, not to perform a radical removal of goitrous glands, and on the other hand that the ill effects can be obviated by leaving behind a small part of the gland.

(6) Extract of the thyroid gland is capable of removing symptoms due to the natural or artificial absence of this gland.

There has been most painstaking and critical study of cases, in the full realization of late, that in many cases of invalidism, where it may not even for years have been suspected, the solution of the problem as it has turned out has depended en-

tirely upon the condition and behavior of the thyroid gland as the key to the situation, and, too, as the only reliable guide to treatment. Individuals have undoubtedly been treated by all of us for so-called anaemia, who really were sufferers from impairment of function of the thyroid gland. The milder degrees are no doubt every now and then at least met by us, and the important consideration is that our minds as medical men should at all times be ready to suspect the possibly important relation between either defective or hypo-secretion of the thyroid juice on the one hand, or hypersecretion, excessive secretion of the gland on the other.

In the list of those pathological states resulting from insufficient thyroid activity are obesity, adiposis dolorosa, sleepiness, mental apathy, dryness of the skin, chronic eczemas, digestive disturbances, slowing of the heart, increase in the blood pressure, amenorrhoea or scanty menstruation. Cretinism may also result from defective thyroid function in the mother. Myxedema is positive evidence that the thyroid gland is not doing the full measure of its work. The last two photographs submitted for your examination today will show you two patients recently in the Mt. Carmel Hospital where there were frank evidences of myxedema, of moderate degree at least, in one of them, with more pronounced myxedema in the other, with atrophy of the thyroid gland in each instance. Both patients were dull, slow in speech, had puffiness of face, a kind of look of oedematous pallor about the eyes, chilliness, small pulse, a harsh, dry, scaly condition of the skin, and in one of these cases, and in still another patient now under observation, a condition that should always arouse one's suspicion of possible myxedema—a kind of dense oedema of the lower extremities that does not pit on pressure. On the other hand, those suffering from exophthalmic goiter in the early stages, with excess of thyroid secretion, are excitable, inclined to insomnia, fatigue on slight effort, emotional disturbance, palpitation from slight cause, and are looked upon too often as neurasthenics for whom heart tonics and sedatives are employed, and, too, when drugs cannot arrest the flooding of the organism with the toxic products of the perverted thyroid functioning as brought out by Kocher in his latest writings, and surgery will cut off by partial thyroidectomy, a large part of the thyro-toxic supply.

Prof. Theo. Kocher of Berne, the pioneer in this kind of work, had done last March 5000 operations upon the thyroid gland. His surgical results have probably been unsurpassed. He says that the surgical treatment is the treatment *par excellence* for Basedow's disease. By this he means that eventually at least, the removal of a part, often a considerable portion of the thyroid gland is necessary for the relief of the disease. However, the litigation of one or more sets of the vessels of supply to the gland may be all that the enfeebled condition of such a patient may at first justify. In his writings he emphasizes the point that the deaths and disappointments following goiter operations are in those individuals who have been subjected to unreasonable delay before reaching the surgeon; for well-nigh hopeless degenerative changes—vascular, cardiac, pulmonary, and even renal—may develop in connection with any of the surgical affections of the thyroid gland.

The writer has been surprised at the remarkable position taken by certain internists with reference to Basedow's disease, i.e. that the treatment should be that of rest and medical treatment as a substitute for, and as apparently being more efficacious than operation. Wage-earning men and women upon whom others may be depending for a livelihood cannot all afford the method of palliation in cases of Basedow's disease. The result of surgical interference in such cases cannot justly be predicated upon operations performed upon patients who have become as the result of delay, the subjects of advanced constitutional and pathological change. However, so far as we have learned, the greater number of cases subjected to operation at our hands have shown a very marked improvement or a cure. Between January 1, 1907, and November 1, 1912, there have been 100 occasions in the practice of Dr. Charles Hamilton and the writer upon which operation upon the thyroid gland has been done. There have been three deaths in the entire series alluded to.

Kocher does a large proportion of his goiter operations under local anaesthesia, and in accordance with his recommendation

we have been employing it in our own service. In 39 of these cases a local anaesthetic alone was used. In the remaining 61 instances a general anaesthetic was administered. In regard to the applicability of a local anaesthetic, it should always be given with the assurance to the patient, that if insisted upon, a general anaesthetic will be administered. The writer has seen very few instances, if any, in which inordinate excitement or shock has been in any way associated with the use of novocain. Even sufferers from Basedow's disease have shown remarkable tolerance of it. It is valuable from the fact that certain very unpleasant conditions which we apprehend as occasional sequels of general anaesthesia are quite uncommon where a local anaesthetic has been used. Pneumonia; vomiting and straining, with occasional hemorrhage therefrom, due to dislodgment of ligatures; suppuration; a greater liability at least to moderate sepsis associated with secondary hemorrhage; injury to either recurrent laryngeal nerve; delayed healing and possibly a larger ultimate scar therefrom—any of these complications are less liable to occur than after the use of a general anaesthetic.

Under local anaesthesia, the patient being catechised from time to time during the operation, while one is engaged in dissecting near, or in clamping or tying tissues in the region of either recurrent laryngeal nerve, can answer aloud, thus showing the nerves not to have been disturbed as long as there is no impairment of the power of speech.

The solution employed for hypodermatic use is one containing a 1% solution of novocain in water, to which have been added (preferably just before operation) about three drops of Parke-Davis 1-1000 solution of adrenalin-chloride, to 10 cubic centimeters of the novocain solution. Kocher of late has been using a ½% solution, which seems advisable, as it leaves a larger quantity of the drug to be used for deeper infiltration purposes.

Novocain is the hydrochloride of the diethyl-amino-ethynol ester of para-amido-benzoic acid. It is said to be non-irritant even in strong solutions; soluble in one part of water, and the solution may be boiled without decomposition. Its toxicity is slight.

As to the technique employed in using novocain, a cap covering the hair having been applied to the head, and the patient's field of vision having been cut off in some way, the posture of elevation of the upper part of the body and neck is so arranged as to give as much prominence to the goiter as the patient's comfort will permit. The operative and contiguous field having been prepared in the usual way, the point of the scalpel is deliberately used to make a scratch in the skin in the line of the incision to be made. In partial thryroidectomy an ample collar incision of the Kocher pattern is more often serviceable than any other. A large syringe containing about 20 cubic centimeters of the solution is generally employed. It is introduced into the subcutaneous tissues at a few points along the indicated line, and as the needle is withdrawn the fluid is gradually introduced. The absorption of the fluid may be facilitated by massaging the surface with a little wad of gauze. It ordinarily takes about five minutes to prepare a patient for the incision. In the deeper dissection, more of the novocain-adrenalin solution may, from time to time, be required.

In spite of the fact that in many of the patients there is some pain, the writer has had repeated testimony to the analgesic effect of the drug. The patient is permitted to drink water or some dilute stimulant either during or right after the operation. The general testimony of patients who have had it employed has been favorable. It is likewise true that these patients as a rule make very satisfactory progress after such operations.

We have used novocain also in a great many lesser surgical undertakings, and have found it quite serviceable. The writer found it very efficacious in two elderly patients, both of them very much enfeebled, for whom we had some dread lest a general anaesthetic might not be well borne. One required cholecystotomy for gallstones; the other was subjected to a posterior gastro-enterostomy for advanced carcinoma of the stomach. Both bore the operation very well, and convalescence was prompt and uneventful. The individual who had cholelithiasis is quite well, having gained 60 pounds in weight. The sufferer from cancer, after having been greatly relieved for a number of months, finally succumbed to marasmus and exhaustion.

TURBINOTOMY, INDICATIONS AND JUSTIFICATION.

By T. W. Moore, M.D.,
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(Read before the American Academy of Ophthalmology and Oto-Laryngology, Niagara Falls, Ontario, Aug. 22d, 1912.)

The purpose of this paper is not to advocate the ruthless slaughter of the turbinates, as was done by one of our distinguished fellows a few years ago, but to try to ascertain the status of our colleagues in relation to turbinotomies which are generally condemned, and yet it seems practiced as a routine procedure by so many, if not all rhinologists.

You will remember that the chief functions of the nasal cavities are olfactory, respiratory and vocal, but they also serve as a drainage canal to the accessory sinuses and the lachrymal secretion, and as a ventilating shaft to the Eustachian tube. As all savors are perceived by the nose, it is largely concerned with many of the sensations ascribed to taste.

If, as physiologists tell us, at least 10,000 liters of air pass through the nose in 24 hours; that at the lowest estimate 1,500 organisms are inhaled into the nose every hour; and that it must be a common event for 14,000 organisms to enter during an hour's tranquil respiration[2], then if the nose is obstructed, the same volume of germ laden air passes directly into the lungs unwarmed, unfiltered, and with its humidity unmodified, as it would be if it had passed through a normal nasal passage.

I fully appreciate the great value of the ciliated epithelium that lines the nasal cavity, excepting the olfactory region, in catching dust and other minute foreign bodies, and also how essential is the vascular structure of the turbinates (especially the inferior) in warming the inspired air; but of what use are these tissues if the air does not pass through the nasal cavities, owing to obstruction?

Some years ago Pynchon[3], in a paper before this society, emphasized the great necessity for free ventilation of what he termed the "attic of the nose", and impressed upon us (what had been known[4] for years, but to which little heed had been given) that the current of inspired air does not go directly through the inferior meatus, but ascends in a curved direction into the middle meatus and then gradually descends towards the choana. Expired air travels chiefly along the inferior meatus.

I believe, as is the practice among rhinologists today, that a submucous resection of the nasal septum should be performed whenever it is possible to obtain sufficient breathing space by this method, but where this is impossible, owing to hypertrophy of the turbinate bodies, or to too narrow nasal cavities, a sufficient amount of this tissue should be removed to permit free respiration.

I can say with Freer that "I have never seen atrophic rhinitis as a consequence of even the complete removal of an inferior turbinate, and believe it to be a distinct pathological process which cannot be surgically created"[5].

Let us enumerate some of the conditions that justify turbinotomies.

Where there is sinus disease with the accumulation of pus in any of the sinuses draining through the matus semilunaris, it is almost always necessary to remove the anterior end of the middle turbinate. The inflammatory condition has produced oedema in this region, often sufficient to entirely block this orifice and even with a counter opening it is frequently difficult in the maxillary sinus to obtain proper drainage without this step; and it is equally as essential in ethmoid disease, especially of the anterior cells.

Then where this body is in contact with the septum and you have, as we often see, the inferior portion of the nasal channel apparently free and unobstructed, yet the patient has a sensation of stoppage much in excess of the actual degree of occlusion that may exist. Here the sense of relief experienced by the patient is often remarkable when the portion of the middle turbinate that is in contact has been removed.

In hay fever and asthma, it is frequently astounding the relief experienced by these sufferers from removal of that portion (usually the inferior border of the anterior end) of the middle turbinate that is in contact with the septum.

Some of you may recall that in 1903 I read a paper[6] before this society advocating the removal of the middle turbinates as a cure for asthma, and reporting ten patients

"cured' by this procedure. I regret to inform you today that all of these patients returned within five years, having had an attack of asthma. Six were much benefited for periods varying from six weeks to five years, and one of this number (a girl of thirteen) has only had a few attacks during the nine years since her middle turbinates were removed. These results have puzzled me, but it is surprising how often we find polypoid degeneration of the mucous membrane of this body in asthmatic conditions. Just what the relationship between these afflictions and the middle turbinates is, I confess I do not know, but I believe that none will hesitate to operate in these diseases if there is any evidence of the turbinates being abnormal.

We frequently find pressure headaches that are permanently relieved by middle turbinotomy. These headaches are usually worse in the forenoon or early morning. I have often relieved patients by painting the turbinates with a solution of cocaine in one to ten thousand solution of suprarenalin, and many of them are cured by removal of the pressure by operation.

I do not so strongly advocate operative treatment of the inferior turbinate unless this body is diseased. However, this is so in a large percentage of those cases in which marked obstruction has existed for some time, especially the posterior end and inferior edge of this body. It is very rarely that I feel justified in removing more than this unless it is a necessary sacrifice in removing the wall of the maxillary sinus.

I am inclined to operate more liberally on this body, especially the posterior end, in chronic middle ear catarrh. While I have not, by any means, had the results that I desired; it has seemed justifiable if the turbinate is at all hypertrophied.

I usually use the Beckman's scissors and the snare when operating upon the middle turbinates. If the space is too small for this, I use some biting forceps, usually Luc's. With the conditions that I find demanding operation on the inferior turbinate, I usually use the snare and Knight's scissors. Formerly I used the saw, but as I have grown more conservative, I find less use for it.

I have had no experience with the submucous operation[7] upon the turbinates, and my work has been so satisfactory, seldom having had delayed healing or much scabbing, that I have hesitated to try a more technical operation.

(1) Reynolds, Dudley S., *Laryngoscope*, April, 1904.
(2) Thomson, Diseases of the Nose and Throat, 1912, page 5 et seq.
(3) Pynchon, *The Laryngoscope*, December, 1901.
(4) Goodale, *Boston Med. and Surg. Jour.*, November 5, 1906.
(5) Freer, *The Laryngoscope*, December, 1911.
(6) Moore, *The Laryngoscope*, July, 1903.
(7) Freer, loc. cit.

SPLENO-MYELOGENOUS LEUKEMIA—REPORT OF CASES.

By O. D. Barker, M.D.,
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(Read at Annual Meeting of State Medical Ass'n, July 11, 1912.)

Before I elaborate the subject I have selected, I wish to offer a few introductory remarks. I do not wish to convey to your minds how much or how little I know of this rather rare affection, but what I do wish is, to impress upon you the following considerations, for I have myself been impressed with the value of these preliminary steps in the study of these cases coming under my observation.

First, as general practitioners we are inclined to neglect in many instances the making a thorough physical examination of each case coming under our care, and especially where symptoms are obscure.

Secondly, we do not rely sufficiently on modern laboratory methods to unravel these clinical entanglements that fall into our hands so frequently.

Thirdly, and most of all we do not think as freely for ourselves as we should, even when these data are given us. Every case deserves a thorough physical examination, a blood examination, and an analysis of the urine, and where clinical signs are suggestive, a sputum analysis.

Modern laboratory methods are so plain, the material so easily obtained, and in most instances the opportunity is so open, it is a reflection on the physician himself if these opportunities are neglected. It was in 1845 that Virchow first obtained an insight into this disease leukemia. His diagnosis was made through the great increase in the white blood corpuscles which constituted the

essential symptom of the malady. There were other conditions, however, in which this essential sign was noted, but this was only a temporary condition and generally the increase was not so marked.

If for comparison we take the normal count of the white corpuscles of 6,000 to 10,000 per cubic millimeter of blood, the term leucocytosis is applied where the number rises to fifteen or twenty thousand, or even higher, as forty or fifty thousand. A leucocytosis of this sort is found under normal conditions, viz., at the time of digestion, in pregnant women, and in the new-born. Under pathological conditions, chiefly in certain febrile cases, particularly pneumonia, erysipelas and septic conditions.

Genuine leukemia is a rather rare disease. Its characteristics are well marked in most cases, but of its true nature we are entirely ignorant. In the majority of cases the changes in the blood are associated with changes in the spleen and bone marrow and often in the lymph glands. The reason given for this is that the organs just enumerated are chiefly concerned in the manufacture of the blood and particularly the white cells. Therefore it is very reasonable to suppose that leukemia is a disease that primarily affects these organs, and the increase in the white corpuscles results from the disturbance thus occasioned.

Though we know nothing of the development of this condition, it is not uncommon on this continent, but considering its true form it is classed under the rarer diseases. The following are looked upon as among the etiological factors, purely from a theoretical basis:

A greater number of cases are found in males than females. It is seen more in adult life than in youth, though cases have been reported occurring in the very young. Malaria is believed to play a part as an etiological factor. The disease sometimes follows an injury or blow. There are instances where the disease has developed during pregnancy. Heredity is given as a causal factor. Various febrile affections are given as a cause, as well as lues. Though his views have met with but little acceptance, Lowett has described a parasite as the cause.

As in all other conditions of this nature the following causes are given as having some influence in the production of this disease: Poor food, bad hygiene, anxiety, mental depression, etc.

Morbid Anatomy. The essential change in leukemia, as previously stated, is the great increase in the number of the corpuscles, and upon this the diagnosis is mainly based. The lesions to which we shall confine ourselves are chiefly in the spleen, the bone marrow and the lymphatic glands.

Spleen. This organ is chiefly affected. It is increased in size and weight, and in late cases has a yellowish appearance. Its consistency is greater than normal, and a true hyperplasia exists in the whole organ On microscopic examination the blood vessels are enlarged and there is also a great increase in the cells of the pulp and follicles. The latter are sometimes in excess, giving the spleen a spotted appearance. Atrophy and fatty degeneration at times present with deposits of pigment. In advanced cases following this hyperplastic change there is an increase in the connective tissue. Hemorrhagic infarcts are found where there has been any tendency toward hemorrhage.

Bone Marrow. A few authorities claim the lesions found here to be the essential change. There are exceptions to this. In the majority of cases the marrow presents a yellowish puriform appearance. Microscopically there is considerable increase in the lymphoid cells, and nucleated red cells are found.

Lymphatic Glands. In many cases the glands remain perfectly normal. In other cases they are considerably enlarged, even to the size of tumors. Microscopically there exists a true hyperplasia. I do not wish to convey the idea that there is a distinct difference in any of these lesions, or create the impression that there is in each a distinct type, for quite to the contrary, this is a rare occurrence. The lesions as a rule occur conjointly. Just where the connection in the blood changes and the lesions in the organs just enumerated occur is the unanswered question. The view which seems the most plausible is that offered in the beginning of this paper, viz., that the lesion is the primary disturbance and the blood change follows.

Changes in Other Organs. The lesions in all other parts of the body may be regarded in a certain sense analagous to metastasis; as in Peyer's patches, the tonsils,

retina, and lungs, in fact all parts of the body where lymphoid tissue exists. This suggests to my mind the diffusion of the body poisons, if such a thing exists.

I quote, with apologies to the author, von Leube, the following:

"The action of a specific agent causes a pathologically great stimulus to the growth of the hematopoietic tissues of the body, which especially affects the production of the white blood corpuscles. As the result of this, flooding the blood at one time with lymphocytes, at another time with leucocytes with mature and immature forms of the same, occurs. This change in the blood is continued partly by the pathologic irritation of the blood-forming organs, partly because the superfluous white blood cells are insufficiently used up in the economy of the body."

Clinical Course. The course of this condition is almost always chronic, the disease beginning insidiously and progressing gradually. Though the patient's symptoms are insignificant at first, it is not until late in the disease that his attention is called to any distinct sign, this being as a rule first a perceptible enlargement of the abdomen, or if in the lymphatic channels the glandular enlargement. Bleeding from some source may attract attention. Fluctuation in the temperature may at times disturb the patient for several days. Recovery is not entirely hopeless; the most favorable reports come from these cases in which early treatment has been instituted by means of the X-ray.

The following cases have come under my observation during the past eighteen months, which I have followed as carefully as possible:

CASE I.—Male; age 12 years.

History.—Mother living. Has had three children and one still-born. General diseases of childhood. Present state of health fair and apparently good except some eye trouble of minor importance. Father killed on railroad at age of 39. So far as coud be ascertained was in good health at time of accident. Brother and sister living in good health. No history of any specific trouble can be found.

General.—From the present surroundings, and all things considered, the hygiene of this patient cannot be considered the best nor would one naturally feel the food has been of the best quality.

Eight years have been spent in public schools; each year he has been promoted. Cause of leaving school was poor health. Since that time he has been bell boy in local hotel, but at times was unable to work. Patient has had the ordinary diseases of childhood, as measles, chicken-pox, mumps and scarlet fever. For the last year has been in poor health.

I was called on the evening of January 15th by the patient's sister, and found him in bed suffering with considerable pain in the left side and some headache. There was a slight difficulty in breathing, and the pain increased when the patient tried to move. He lies on his right side with the left leg semi-flexed. Very much emaciated and the skin feels hot and dry. Temp. 102°, with a quick and rather weak pulse of 120.

Physical Examination.—Gastrointestinal. Tongue coated and dry, bowels constipated and abdomen distended.

Respiratory.—Some cough, loose in character. Chest examination negative except for a few moist rales on both sides.

Nervous System.—Reflexes if anything somewhat exaggerated, reaction of pupil normal to light and accommodation. Conjunctiva pale.

Abdomen.—There is a distinct general enlargement of the whole abdomen, this especially marked in the left side. On palpation a mass is felt in the left side extending well over to the median line and as far down as the brim of the pelvis. On the right side the liver can be felt well below the border of the ribs. The mass in the left side has a distinct notch about four inches above the level of the umbilicus, while the edge of the whole mass has a sharp well defined outline.

Circulation.—Pulse rapid with somewhat weakened force. A murmur is heard at the base of the heart, but not distinct and at times it disappears.

Genitourinary.—The total amount of urine in 24 hours is normal. On examination the color is dark and sp. gr. 1.030. Albumen is found in variable amounts, but no casts.

Blood Examination.—It was noticed when the patient's ear was pricked that the drop did not flow as readily as usual, and the color was pale. Haemoglobin estimation 55%.

Average white cells from six slides 344,000 while the differential count showed plainly a large increase in the mature leucocytes, but as well abundant myelocytes and large lymphocytes.

The red count showed an average of 3,650,000 many nucleated red cells present.

CASE II. Mr. McD., aged 33 years, farmer, married and has three healthy children. Mother and father living and well. Seven brothers living and well. One brother dead in infancy of bowel trouble. Has had all the ordinary diseases of childhood, and eight years ago had small-pox. Has always lived on a farm and spent most of his life in the open air. The family history is good.

He dates his present trouble from a period soon after his attack of small-pox. He felt occasionally some pain in his side, and two years ago a small lump, as he expressed it, was noticed. To this he called his family physician's attention but was told it did not amount to anything and would probably soon disappear. This

lump has gradually increased in size until now it is quite prominent.

I was called by the patient's father on the evening of November 12, 1911, stating he believed his son had an attack of appendicitis, as he had a great deal of pain and was very feverish, and that a similar condition had existed some weeks ago, at which time a provisional diagnosis of this condition had been made.

I found my patient in bed when I arrived, suffering with a general abdominal pain, vomiting, and a rapid pulse. His temperature by mouth was 102 2-5. Gentle pressure on the abdomen increased this pain, but especially over the left hypochondrium. The abdominal muscles were quite rigid, and not until I had injected ¼ gr. of morphia was I able to obtain the following:

Gastrointestinal. The tongue is very foul as well as the breath, and abdomen is quite distended. The patient is nauseated and has no appetite. Examination of chest negative except for slight cough.

Abdomen. The spleen is extremely enlarged, extending well below the level of the umbilicus and as far over as the median line. The border of the liver can be felt below the margin of the ribs. Both are tender and pain is especially increased on pressure over the former. The abdomen is very tympanitic. The remainder of the physical examination was not continued for 48 hours, as the patient was very uncomfortable and felt that measures should be used to control the immediate condition.

Two days later the patient made his appearance at my office feeling much better. The abdominal enlargement was easily outlined and at this time a blood examination was made. Again in this case the blood has a somewhat pale appearance. The mucous membranes are pale, in fact the signs of anemia are prominent. A white count shows an enormous increase, while the red count falls below the standard, with an occasional nucleated cell. Differential count shows an abundant increase in the myelocytes and lymphocytes as well as mature leucocytes.

Case 3.—Mrs. G, age 25, married at 15, has two children.

I am sorry that the complete history of this case cannot be obtained. The family history is negative and the earlier life of the patient has been exceedingly good.

I am inclined to believe the earlier symptoms of this case pointed strongly toward the gastrointestinal canal, and following these symptoms the patient was treated for a lesion accordingly.

I was asked to see the case by one of my colleagues who had already made the diagnosis of leukemia and who gave me the history in the following manner as the symptoms presented themselves to him. The patient has every sign of an anemia of long standing.

The spleen is very large, reaching well down into the lower abdomen. The liver is felt well below the costal margin. Tenderness is elicited over both organs and much distress is complained of from the pressure of the former as well as the tympanites and anasarca.

The limbs are oedematous well up above the knees and the patient is short of breath. The conjunctiva is pale as well as the skin. Even at this time the gastro-intestinal symptoms are prominent and the patient is unusually constipated.

The course of the disease in this case is interesting. On two distinct occasions the patient had a severe gastric hemorrhage. She not only vomited a large amount of blood but it was found freely in the stool. Not of a bright red character, but partially decomposed. The signs following immediately after these hemorrhages were those of an acute shocked condition, but, interesting to note, each time within a few days the patient felt much improved. During the spring of 1911 she had a severe case of influenza, at which time her symptoms were very grave. On June 23rd the patient had another hemorrhage from which she succumbed.

The blood count in this case does not differ materially from that found in the others except the white count was not as high at times. The differential count corresponds very closely.

Case 4.—Mrs. K, age 54, born in U. S.

Father and mother dead but cause of death unknown. Both died at an old age with no history of any hereditary condition.

General. Ordinary diseases of childhood in early life. Generally speaking until the last few years has been very vigorous and able to attend to housework on farm. For the last two or three years has complained of some pelvic pain. Menstruation began at the age of 12. Has always been regular every twenty-eight days. Has never been pregnant. Last July noticed abdomen getting larger, and from this time on the patient dates her present illness. She has continually lost strength and weight and her side has increased in size. Pain has been a prominent factor which has been worse during the past three weeks. This pain of a gnawing, aching character, has driven the patient to seek some relief. She was referred to me on May 10th of this year for examination.

The patient stated she had consulted several physicians and the last had suggested an operation as the only means of relief as her condition was that of uterine fibroid. This diagnosis was corroborated by another physician, as well as the treatment. She has not menstruated since the age of 47 or had any sign of bleeding at any time. No discharge or vaginal irritation.

Physical Examination. The patient at the first glance presents the picture of a severe anemia. The slight exertion of climbing the steps that lead to my office have caused her to breathe with some difficulty, and complain bitterly with pain in the left side.

There is a distinct protrusion I might say of the abdomen and the facial expression is drawn

Gastro Intestinal. Tongue coated and dry. Appetite poor and bowels constipated. Patient complains of nausea at times and the smell of food takes away all the appetite. Also has a fear that eating increases her present trouble.

Respiratory. There is a slight cough, pains are felt in various areas of the chest, especially over the left scapular region. Respirations are in-

creased to twenty-four per minute. Physical examination negative.

Nervous System. Says she cannot sleep. Feels as tired in the morning as the night before. Pupils dilated and reflexes normal. Headache nearly every day.

Circulatory. The pulse is fair. It is rapid but the volume is good. The rise quick as well as the fall. No murmurs can be found.

Genito-Urinary. Total amount of urine in 24 hours 38 oz. Small trace of albumen and some casts. Sp. gr. 1,012. There seems to be some change already going on in the kidney and responsible for the blood pressure in this case.

Examination of the Abdomen. The enlargement is enormous, showing an evenness in its outline. Palpation reveals a mass filling the entire left abdominal cavity and extending well into the pelvis. The abdomen contains some fluid and the lower extremities are quite oedematous. The liver cannot be felt.

Vaginal Examination. The uterus is atrophied and high in the vagina. No pathological condition present except the lower edge of the abdominal mass can be felt and is easily recognized as the spleen.

Blood Examination. As was noticed in the beginning of my examination, there is extreme paleness of the conjunctiva and the buccal mucous membranes. The blood on pricking the ear has a pale appearance and does not flow freely. White count repeatedly show an enormous increase up to 280,000, while the red count falls short, as low as less than 3,000,000. Differential count does not vary from No. 1, and nucleated red cells are present.

CASE 5.—Mrs. A., married, age 29, no children.

History. Mother and father both dead. Father died of dropsy and mother of pulmonary tuberculosis. Four brothers, one living and well, three dead of tuberculosis. Three sisters living and well. Has been generally healthy all her life. Has had the ordinary diseases of childhood, as measles, chicken-pox, mumps and scarlet fever. While she denies all venereal diseases, she has had at some time a leuetic infection.

Menstruated first at the age of 13 and has always been regular; has never been pregnant. The above patient consulted me first in September of 1910 for a tubercular syphlide which reacted to the inunction of mercury and potassium iodide. After a prolonged course of treatment the patient gained in weight and felt perfectly well.

I did not see her for several months until I was called to see her again on June 26th of this year. She was suffering from a general abdominal pain, and in making my examination I found a distinct mass in the left side. It was easily recognized as the spleen extending about four or five inches below the border of the ribs. Somewhat tender to touch and even in its outline. The patient's symptoms in general were relieved by an ounce of castor oil, and in making a blood examination it revealed the following:

Haemaglobin estimation 70%. White count, 40,000. Red count, 5,680,000. Differential count, relative increase in myelocytes, mast cells, and eosinophiles. There is also a large percentage of polynuclears.

In this case it is seen that even with a blood count of 40,000 a spleno-myolegonous leukemia is demonstrated from the differential white count.

Treatment.—It is unnecessary to enter into a discussion of the medicinal treatment of this disease, so far as drugs are concerned excepting those used in treating the intercurrent affections associated with this disease, such as the acute anemia, gastro-intestinal disorders, etc.

In all the cases I have reported it will be seen that the acute symptoms were due to an intestinal intoxication, and in the majority of cases a constipation existed. For the relief of this it has been my plan to give an initial dose of mild chloride which may be followed by a mild saline laxative. The diet is limited for a few days, and the patient placed on some form of intestinal antiseptic.

Arsenic has shown itself to exercise an inhibitive or temporary curative effect, and in most instances iron in some form is administered. For the constipation cascara works well and under this treatment the digestion improves. It has been reported in cases of spleno-myologenous leukemia where an intercurrent infection has existed a spontaneous cure has resulted. In none of my cases has this occurred and I refer to this mainly as suggestive.

The condition of the gastro-intestinal canal must be watched, for, as in many other conditions of this character, it takes but little to disturb the equilibrium and we want all the forces to act in harmony. It thus sums itself up as an entirely symptomatic treatment.

Other Agencies.—The X-Ray. My experience along this line of treatment has been most gratifying. In treating my cases I have followed as closely as possible the outline of Dr. Alfred Stengel and Henry K. Pancoast in their original article on "A More Rational Treatment of Leukemia by X-Ray," in the April (1908) issue of the *Journal American Medical Association.*

What effect is obtained by the use of the X-Rays and in what particular manner should this method of treatment be used?

First. As shown by the experiments of several investigators the rays have a decidedly destructive effect on the leucocytes, especially the mono-nuclear cells and myelocytes, and in this destruction of these cells there is formed a leucolytic substance which

has also a destructive influence on the leucocyte either in the exposed individual or in those into which the serum has been injected.

The effect then, in treating with X-Rays the spleen or lymph nodes of leukemia patients, may be stated as follows: First there is a destruction of certain cells, and secondly a product is formed from this destruction that has a destructive influence on these cells in the spleen, lymph nodes, and bone marrow.

It is apparent, then, if these asserted facts are true, that the source and origin of the disease is reached in a round-about way. Then why not treat this disease more directly and also avoid the violent reactions that sometimes take place from the direct exposure of the spleen? It has been my conclusion from the writings of the above authors, that it is not so desirable to obtain these violent reactions from the local treatment of the spleen alone, and as they express their views in the exposure of large deposits of vulnerable cells as in treating in the above manner, but, selecting the extremities, shoulders, spine, etc., lastly exposing the spleen which shows a more progressive diminution of the cells and as well a progressive decrease in the size of the spleen. Experience has shown that a single application directly over the spleen of a leukemic patient is usually followed by a decided drop in the leucocyte count, and if the exposure has been long enough a decided toxemia follows. Then we must suppose that after this one exposure the count will later rise to a higher figure than before the exposure, and the spleen is still active.

I shall not go into detail as to the time of exposure and the selection of areas, which of course varies as to the patient, nor into the clinical observations that follow the use of the ray in this manner. In the first case that came under my observation my method of exposure was that of the older form, and I had the experience of seeing the reaction that usually follows this character of treatment. In the other two cases in which I used the ray the results were most beneficial. There was accordingly a complete disappearance in the oedema and symptoms associated with the intense anemia.

The spleen was steady in its diminution in size, and repeated examination was followed by a reduction in the number of white cells. These patients are improving constantly and are both able to attend to their vocation. It is to be remembered that this treatment must be continued over a long period of time, and under no circumstances must the results be expected unless the treatment in every manner is uniform.

Seventh and Market Streets.

VENEREAL DISEASES AND THE GENERAL PRACTITIONER

By Peter Sloan Keim, B. S., M. D.
Elk Garden, W. Va.

The free and unlimited coinage of venereal diseases, at the ratio of 16 to 1 (16 males to 1 female), has been going on for untold generations. They are epidemic in cities; to a lesser degree smaller towns and the rural districts suffer from epidemics on the return of the prodigal son. Morrow states that more than 80% of the male population of the United States contract gonorrhea before the age of thirty years. The gonococcus is responsible for 70% of the pelvic operations upon women; 30 to 50% of congenital blindness, and at least 50% of the involuntary sterility. These figures take no account of the countless women who suffer in silence at home, either through ignorance of their true condition or timidity in seeking medical advice. Gonorrhea mercifully sterilizes both men and women, thereby preventing conception, while syphilis ruthlessly maims and destroys the product of conception or so vitiates the constitution of the offspring that he goes through life greatly handicapped by mental or physical deficiency or both. Mental and physical vigor is an asset that one can ill afford to lose in these strenuous times when it takes the very best of brain and brawn to win a competence for ourselves and our dependents.

Our first duty as to venereal, as well as other diseases is, to prevent them as far as it lies within our power to do so. The surest and best way to prevent them is to prevent indiscriminate and clandestine cohabitation, which would be, undoubtedly, as easy as to stop the flow of the Nile. There have been devised numerous methods for the prevention of venereal diseases, all of which are more or less successful. The most prominent, and probably the most

efficient, among them is, the plan devised and adopted by the Medical Department of the United States Navy. Briefly, this plan consists of (1) lectures on sexual hygiene and the disastrous results following neglect in the treatment of these diseases. (2) Application of the treatment, which involves the prompt reporting of a man when he returns from shore leave. If he has been exposed, his penis is carefully examined and thoroughly scrubbed with liquid soap and water. All abrasions found are cleansed with hydrogen peroxid in a hand atomizer, and the whole organ is washed with mercuric bichlorid solution 1 to 2,000. He is then placed in a sitting posture, well forward on a chair, and is given two injections of a 10% solution of argyrol, each of which he is required to retain within the urethra for five minutes. After the injections the entire penis is thoroughly anointed with a 33% calomel ointment, and a protective dressing applied. The victim is then admonished not to urinate for two hours and to allow the ointment to remain for several hours. If the above treatment is faithfully carried out, in all probability the dreaded venereal disease will not appear.

Lectures to young men and to young women are becoming ever more popular, but they will never bring about the desired results until prudery is eliminated and the bare facts regarding the Venereal Peril are brought out in a plain, common-sense manner. Legislation has been suggested and tried, but without very flattering results. Segregation may be the long-sought-for remedy, but as yet a satisfactorily working plan has not been evolved. Compulsory reporting of venereal diseases to the county health officer is objectionable on the ground that it would drive these unfortunates to the conscienceless quack or the counter prescribing druggist where they would be worse than neglected. First legislate the quack and the counter-prescribing druggist out of business, and compulsory reporting will be feasible. A second conviction of fornication was made a felony, without benefit of clergy, in the days of Cromwell, but it was found inconvenient and had to be repealed after the Restoration. In so far as history can be relied upon, Moses was the only legislator who ever lived that absolutely controlled disease by legislation, and he resorted to extreme measures to do so, measures that we would not consider applicable in our day. When the Israelites prostituted the daughters of Moab, Moses cleaned up the Israelites to the tune of four-and-twenty thousand, and the plague was stayed.

In view of the foregoing facts and fancies my conclusions are that venereal prophylaxis is rather a matter of education than legislation, and it is up to us to educate the people so that they may be spared untold misery and eliminate the greatest factor in race suicide extant. After briefly considering prophylaxis we find that we still have a few cases of venereal diseases to treat, and these should receive the same careful and conscientious consideration as the other contagious or infectious diseases. We should always make a thorough examination and never be guilty of treating a case on the strength of the patient's own diagnosis. This may seem to many to be a superfluous admonition, but I have seen many otherwise excellent physicians prescribe for "clap" without even inspecting the diseased organ. The two or three glass test should always be made in gonorrhea.

The treatment of acute gonorrheal urethritis is divided into (1) internal and (2) local. Five classes of drugs are used internally. (Keyes.)

1. Alkalies. These drugs are useful in cases presenting acid urine.

3. Demulcents. These were the favorite remedies of our forefathers but they are now known to have a very limited field of usefulness.

4. Anodynes. These are of use in painful urination and chordee.

5. Balsamics. These are the drugs of greatest value and should be exhibited in every acute case, either singly or in combination.

Keyes also gives the local treatment under five heads:

1. Preventive. The use of antiseptic irrigations and injections.

2. Abortive. The most prolific factor in the cause of chronic gonorrhea and a treatment that has no place except in the hands of the expert.

3. Repressive. This treatment gives excellent results in the hands of the experienced surgeon in suitable cases. It consists of injections of the organic silver salts or irrigations of permanganate. Some use the

two in combination with very satisfactory results.

4. Terminal (Expectant). This is the treatment for the average physician who sees only a few cases in the course of a year, and who has neither the time nor inclination to perfect himself in the technic of the abortive and repressive treatments. The treatment is instituted in the third or fourth week, if the acute symptoms are on the decline, and consists of irrigations, injections and instillations of antiseptics or astringents, or both, according to indications.

5. Complications. These are treated as they arise, according to indications present.

Chronic gonorrhea forms the greatest per cent of the sum total of venereal diseases that the specialist is called upon to treat, and this condition is one of the most trying to patience and patients alike. Hygienic and local measures are of prime importance and constitutional medication is indicated only in rare cases. When the discharge is abundant and contains gonococci, the silver salts are most likely to produce the greatest benefit. When the discharge is scanty and no gonococci are in evidence, the astringents are the remedies of choice. In some obstinate cases, with local foci of infection or sclerosis, dilatation and massage (of prostate) are very beneficial, but it is impossible for one man to tell another just when, and to what extent, they should be resorted to in a given case. This knowledge comes as the result of experidence and entails the exercise of good, sound judgment. Instillations and local applications, through the urethroscope, have their field of usefulness.

In some cases the rectal douche is of the greatest value, while in others it does posive harm. Vaccines should not be forgotten. as their administration is sometimes followed by brilliant results.

This brings us to the post-gonorrheal neuroses—the bugbear to every man who attempts to treat gonorrhea—and I will leave the subject for you to work out, as I am frank to confess my inability to deal with the subject in a satisfactory and intelligent manner.

Syphilis is a well known disease, the initial lesion of which is the Hunterian chancre, characterized by fairly constant symptims and accompanied by well known disastrous results.

"The Wassermann reaction appears fifteen to thirty days after the chancre, and disappears when recovery takes place, when the disease becomes inactive, and when the patient is saturated with antisyphilitic remedies. The nature of the reaction is not understood. It is not, as was at first thought, the result of fixation of the complement by immune bodies in the patient's serum. The test, which requires a trained laboratory worker with a complete knowledge of hemolysis," is not practicable for the general practitioner.

The treatment of syphilis is satisfactory in proportion to the care and discrimination in its exhibition and the experience of the surgeon. Mercury and the iodides have long been regarded as specific but are frequently administered without a reasonable conception of the just results to be expected therefrom. Mercury is administered as a routine treatment during the entire course of the disease, to control the disease and prevent relapses. The iodides are used to cure the lesions, and should be given at the first appearance of gumma, regardless of time, and continued for some time after the lesion has disappeared. Sodium cacodylate is a remedy of great value and can be given by mouth or hypodermatically in the dose of ¼ grain to 15 grains. The latter dose may seem far too large, but it has been given without any untoward symptoms whatever and with marked improvement of symptoms when the lesser doses proved useless. Salvarsan, our latest acquisition, is clamoring for a high place amongst our anti-syphilitics, but so far has been held on probation by the conservative element of the profession. In nineteen cases of syphilis treated with salvansan (which I have had the privilege of studying) by the intravenous and intramuscular injection, improvement was prompt and marked in every case. In all cases the classical treatment was carried out and salvarsan was used only as an adjuvant. However, the improvement was much greater than could be reasonably expected from the classical treatment alone in the same length of time, and this fact would lead me to believe that the remedy is a great boon in clearing up symptoms at least. Seemingly, the disease is much more readily controlled after having had salvarsan, and this is no small item in those rebellious cases that one encounters at times.

ADMINISTRATION OF SALVARSAN.

M. V. Godbey, M.D., Charleston, W.Va.

The administration of salvarsan (606) has been so thoroughly discussed in all recent medical literature, that little can be suggested as regards its action or administration other than by giving our experience.

The common methods of administration are subcutaneous, intramuscular and intravenous.

The writer has treated a series of thirty-seven cases by the intravenous method, and the treatment has been much more satisfactory than by the old line treatment of mercury and iodide of potassium. However, it is not the therapeutics of salvarsan that we wish to discuss, but the method of administration.

There are many expensive outfits upon the market for the administration of salvarsan, but the outfit used by the writer is very simple and one which can be constructed in a very few minutes. An ordinary quart bottle with rubber tubing attachment is connected by about four feet of rubber tubing; about three feet of rubber tubing is attached to a medium sized aspirating needle, the two ends of the tubing are connected by a small glass tube. the needle is inserted in the following manner: after sterilizing the skin, the tourniquet is applied in the usual manner, the needle is then pushed through the skin at either side of the vein, not directly over the vein. The objection to putting the needle directly over the vein, and attempting to stab the skin and vein at the same time, is that you often puncture the vein and fail to insert the needle, but by inserting the needle on either side of the vein and moving the needle back and forth over the vein, with a gentle push it is easily inserted and the blood immediately flows out through the short piece of rubber tubing attached to the needle which shows positively that the proper insertion has been made. The salvarsan solution is then allowed to run through the long piece of tubing from its connection so as to get all air out of the tube. The two pieces of rubber are then connected by the glass connecting tube and the salvarsan solution is allowed to flow into the vein.

The advantages of this method of application over other methods of administration are, that you always puncture the vein properly, that you are always positive that the needle is in the vein, while in other methods it is often impossible to tell whether or not the needle is in the vein or the cellular tissue. If the needle fails to get into the vein, abscess or other complication often results from the solution getting into the tissue. Another advantage is, that by this method we avoid the scar that results from the skin incision often employed in exposing the vein. The administration of salvarsan having become a recognized method of treating syphilis, patients are unwilling to have the scar above mentioned, feeling, as they do, that they are thus branded as syphilitics.

Selections

NEUROCYTOLOGICAL CHANGES, THEIR RELATION TO FATIGUE AND EXHAUSTION.

Dr. David H. Dolley of Columbia, Missouri, has from time to time during the past four years published interesting communications on the anatomical changes resulting from functional activity in nerve cells in normal and abnormal conditions. A recent and we believe his latest paper appeared in the March issue of the *Cleveland Medical Journal* where he gives in a lucid and helpful way a systemization of certain morbid processes as regards their relation to the nervous system on the anatomical basis of its functional activity.

He seems to think that traumatic surgical shock falls under the heading of mechanical stimulation and tells us that a "multitude of abnormal stimuli, generated at the local seat of injury, are conducted along the usual pathways and stimulate the nerve cells in the direction of their natural activities. This is the natural connection between injury and brain. There is a stimulus, there must be an effect. Throughout the nervous system it is to be found, and found in a comparatively more pronounced fashion than in any experimental condition yet studied, as the cell changes of normal functional activity. Surgical shock is essentially a manifestation of the varied cell states of activity, over-activity, fatigue and

exhaustion. The symptomatic expressions are to be referred to the degree of reaction and to its manner of localization, and the working out of the nervous inter-relationship will be the working out of the normal inter-relationship of normal life."

Dr. Dolley makes some general deductions of more peculiar interest to the practitioner as regards the treatment of these conditions. The nature of the anatomical findings, he says, "emphasizes the necessity of caution at least in the use of stimulants. They can only further stimulate cells already highly stimulated, possibly almost driven to exhaustion, and it is easily understandable how, after a temporary and superficial benefit, the resulting state may be actually worse than the first; indeed, dangerously so. Nevertheless, in the present state of our knowledge, it is caution in their use, not absolute contraindication, that seems demanded. For, of course, it has to be borne in mind that because the so-called vital centers are more primitive and hence less easily exhaustible, a stimulant may tide over a crisis due to the more particular involvement of such a center. But from the cellular side and from considerable experience in physiological experimentation along this line, I am strongly of the opinion that the use of stimulants outside of some such definite indication as this is more fraught with harm than good. The main point is that their use, just on the general basis of prostration and weakness, is to be condemned.

"Such stiulating drugs as are ordinarily used consume energy, they do not furnish it. Referring especially to shock, to anemia and to nervous prostration, what is needed is a food,—ordinary suitable food until or unless we can find something specific for the nerve cell's energy renewal. Rest and food and then more rest are the essentials. Weir Mitchell's treatment was solidly conceived. Does a person who is 'run down', as we say, recover as a result of the stomachic plus strychnin—save in so far as it artificially stimulates appetite—or on account of the enforced rest that his enfeeblement necessitates? There is still too much of drugging and too little of practical physiology. And as no one questions the nervous control of the body, it is hoped that the anatomical proof of its functional disabilities will emphasize more concretely its role in originating many neurasthenic and allied disorders which will disappear when the brain is restored to its normal condition and not until then. Such disorders are physiologically produced—they can only be physiologically restored.

"Finally, in the morbid processes here considered is to be found a striking illustration of the truth, which is ever becoming more widespread in its application, that the manifestations of disease are only relatively abnormal in their physiological aspect. The laws controlling their results, evil though the latter are, are the laws of normal life. Between the normal and the abnormal there is no line of demarcation. The normal passes insensibly into the abnormal, however apparent the latter may be as the climax is approached. Of all the forms of stimulation here discussed in their excessive exhibition, only one, the chemical stimulation of the bacterial toxins, can be absolutely eliminated as a factor outside of normal life, and in place of that there is the chemical stimulant with which we almost universally start the day. . We are aware of that, but we are not so aware how surely each has its share, infinitesimal, small or large, in the inevitable effect. On the other hand, there is anatomical indication that the tissue which receives the brunt of it varies in its quality just as much as one individual varies outwardly from another. In a more active capacity as the curator and educator in health, which he has only to assert himself to attain, the physician may find equally as high a scope for his art and science, his judgment and insight as in the capacity of an assistant in the recovery from disease."

In closing he summarizes as follows: "In numerous abnormal conditions there is a common anatomical basis of those identical nerve cell changes which are pecliar to normal functional activity. The common exciting cause affecting the nervous system which is thus predicated is to be found in the physiological factor of stimulation. From this, work and finally over-work result. The types which are thus classified under their form of stimulation, for undoubtedly still other conditions remain to be thus grouped, are: from trophic stimulation, anemia; from thermal stimulation, heat exhaustion; from mechanical stimulation, traumatic shock and at least some trau-

matic neuroses; from chemical stimulation of the bacterial toxins, a group of infectious diseases, again broadly typified; from an undetermined stimulation, either trophic, chemical or psychical, exophthalmic goitre; and from an excessive spontaneous stimulation of everyday life, which in its normal display leads finally and inevitably to natural senescence, neurasthenia and allied disorders." F. LEM. H.

MODIFIED COW'S MILK AS A SUBSTITUTE FOOD IN INFANT FEEDING.

The subject of modified milk as a substitute food for infant feeding has been studied from many points of view, but two facts are being recognized, more and more, as of prime importance; first, that cow's milk is the most practicable substitute food for infants, and second, that it is just as important that the physical characteristics of cow's milk be modified, as to the proportions of its food elements.

It is along these lines that First Lieut. W. E. Fitch of the Medical Reserve Corps, United States Army, has written a most practical paper upon the subject of "Modified Cow's Milk as a Substitute Food in Infant Feeding," published in *Pediatrics* (October, 1912). He studies the comparative chemical composition of healthy woman's milk and cow's milk, the general availability of cow's milk as a substitute food. the physical and chemical differences between cow's milk and woman's milk and the modification of cow's milk with cereal decoctions.

He emphasizes the necessity of using pure cow's milk, not milk that has been pasteurized or sterilized, but fresh, wholesome milk from a healthy herd. We all recognize the fact that the milk offered for sale in the large cities is not as pure as it should be, but under the active work of the Boards of Health and the medical profession, it is rapidly improving in quality. When procurable, certified milk should always be used.

Dr. Fitch points out the fact that the modification of cow's milk with a cereal is a mechanical one due to the gelatinized starch, which changes the hard curdling cow's milk into a soft curdling milk like human milk. The casein of cow's milk clots in hard lumpy masses in the infant stomach, the digestive enzymes cannot get at it, and any means whereby we can break up the clot and make it more flocculent, will increase the digestibility of the milk; and this can be done by the use of a properly prepared cereal decoction.

Not only do cereals modify the casein of cow's milk but they, also, through their gelatinized starch, facilitate the digestion of fats by emulsifying the fats after proteid digestion in the stomach. This is important because, as Holt shows, the tendency today is to give a large precentage of fat, and the fats of cow's milk are more difficult to digest than the fats of human milk. With many infants it is often necessary to begin with an amount less than two per cent of fat, and rarely is it necessary to exceed four per cent. There are numerous healthy infants who cannot even digest four per cent of fat at any time, and many during the hot weather do better on a reduction to 3 or 3.5 per cent.

Theoretically, the child under six months, because of the deficiency of salivary and pancreatic secretions is said to be incapable of digesting starches. Practically this is not true. Nearly every fluid in the human economy has a diastatic ferment and as a matter of fact the very young infant does digest starch. We have seen too many babies successfully fed on arrow root to deny this fact. The author quotes Finkelstein, of Berlin, whose experience and general sound judgment are respected by the leading pediatricians of the world, who is emphatic that very young children are capable of digesting starches, and quotes favorable published opinions by Jacobi, Epstein, Schmid, Minard, Keller, Newman, Heubner and others, while our own Kerley has conclusively shown by his experiments at the New York Infant Asylum, that "there is no age limit for cooked starch feeding."

The addition of cereals to cow's milk is not only allowable, but is to be most warmly recommended, not only in older, but also in very young infants. The advantages of cereal modification, in addition to the readier digestion and gain in weight, are to be found in the finer sub-division of the casein in the stomach, in the emulsification of the fat, in the disappearance of soapy and dyspeptic stools, in the proteid-sparing power

afforded by the cereals, and finally, in the general increment of growth.

This is the experience of the leading pediatrists of the world. Not every infant, by any means, can take cow's milk, or ass's milk, or goat's milk; but that starch foods may be added with benefit to cow's milk in the mapority of cases, is established beyond all question, experimentally, chemically and clinically.

Dr. Fitch then considers the practical details of cereal modification, and gives formulas for milk mixtures, based on years of successful use. He gives, also, clinical reports upon a number of cases had with these formulas.

The article is an exceedingly clear and practical consideration of the much befuddled question of the modification of cow's milk for infant use; and best of all it contains unsable information.

THE USES AND LIMITATIONS OF BLOOD VESSEL SURGERY.

(From *Virginia Medical Semimonthly.*)

Success in maintaining the lumen of a blood vessel after suturing depends upon the amount of thrombus that is formed. This, in turn, is dependent upon the injury to the intima. In lower animals it seems that nature has provided more abundantly for their protection from hemorrhage by the ready occurrence of clotting than in man. Consequently, it is more difficult to obtain permanent success after suturing blood vessels in lower animals than in human beings. The formation of some fibrin deposit is essential to close the almost microscopic lesions that are present from the puncture of a fine needle and the margin of approximation of the intima. If this fibrin is limited it is a beneficent process. If, however, the intima has been roughly handled or has been permitted to dry, or if infection occurs and extends the original injury, more of the elements for blood clotting are liberated, as pointed out above, clotting is more extensive, and the lumen of the vessel is closed. This, then, is the key note of success in suturing blood vessels to have a minimum of foreign material and of injury to the intima.

It might be well for us to consider the present status of blood-vessel surgery. Unfortunately, the spectacular character of this work has attracted the daily press. All sorts of fantastic notions are found not only in the public mind, but too often in the mind of the medical profession. We hear of the successful transplantation of the kidney in a human being, or the possibility of a cripple having a leg removed and another grafted on, or a thyroid gland being grafted sucfully, and so far as the present outlook is concerned there is but little chance of permanent success along this line. To be sure, a kidney can be transplanted from one animal to another of the same species and may for several weeks or even several months secrete urine, but eventually it ceases to functionate. A leg can be transplanted from one animal to another and its nutrition preserved, at least temporarily, by suturing the blood vessels. The leg, however, never becomes useful, the nerves do not regenerate, and it merely remains an inert mass. Whether a kidney can be transplanted with permanent success from one portion of the body to the other remains to be seen. However, after dismissing these fantastic ideas there still remains a large field of usefulness for blood vessel surgery. Probably the most frequent use will be in transfusion of blood. Undoubtedly, in certain cases this procedure saves lives when no other measure can be employed. There comes a time, for instance, in acute anemia when nothing short of healthy living red blood cells will prolong life, and they can only be supplied by transfusion of blood. In injuries of a blood vessel, whether accidental or whether a portion of the vessel is removed in order to accomplish a radical cure for a malignant tumor, the ends can be sutured satisfactorily either directly or by the interposition of a segment of a vein which may be easily obtained from one of the superficial veins of the arm or leg. Arterial suturing to be successful must not only be done with a careful technic, which has been perfected by animal experimentation, but must be done on healthy blood vessels. This condition will make it improbable that an aneurism due to arteritis can be cut out and the vessel ends sutured together.

A surgeon who has this technic at his command can certainly give a patient a somewhat greater chance for recovery from operation when unforeseen complications arise than the surgeon who does not employ blood-vessel suturing. It will be

recalled that fifteen years ago many operators were not prepared to use intestinal suturing and resorted to the Murphy button or some similar appliance. Gradually it was found that the needle and thread constituted the most effective method in resection of the bowel. Probably if this knowledge had come earlier many lives would have been saved that have otherwise been lost because of ignorance of the technic of intestinal suturing. It seems that blood-vessel surgery is undergoing a similar evolution and those who do not equip themselves for this technic may find that they will soon be in the same position as the abdominal surgeon who can not unite an intestine with a needle and thread would be now.

J. SHELTON HORSLEY, M.D.,
Richmond, Va.

COLDS AND HOW TO AVOID THEM.

[Have your county paper copy this.—Editor.]

It is not because we breathe cold air that colds are more prevalent in Winter than in Summer, for cold air is more healthful than warm, even though the warm air be as pure, which is seldom the case.

Cold air is a stimulating tonic to the lungs, and when breathed increases the circulation of the blood, this increasing the elimination of waste products. It is not the temperature of the air alone, however, as much as what the air contains and one's physical condition or resistance. The air must needs be as pure as possible, and this is best attained by a constant ventilation: exchange of cool or cold air from without for the devitalized or oxygen exhausted air from within. Air that is not constantly purified by an exchange of oxygen for carbonic acid is not only injurious to health, but so enervates or weakens one that the normal resistance is destroyed, thus predisposing to not only colds and what follows, but to other complaints even more serious. A relaxed condition which is so apt to be present at the change of seasons, following a warm summer and the advent of unexpected cold of autumn, usually finds us unprepared for the change; the furnace has not been fired, windows and doors are securely closed thus shutting off the interchange of air, while an extra gas jet or lamp is lighted thus more completely consuming the oxygen present and increasing the poisonous exhalations. Much to our surprise, we arise in the morning with a headache, or worse, a cold.

Mouth breathing in children is a chief source of colds. Such children should have their nose and pharynx examined, and any obstruction removed. They should then be carefully taught to breathe through the nose. Ear troubles are frequently traceable to colds.

Then those who live in cities, especially those who live mostly indoors, persist in wearing heavy woolen underclothing as well as too many outer garments. Linen or cotton underwear is much more healthful and sanitary for winter wear than are woolens, especially for those who live mostly within doors. Drafts are feared by most persons, but drafts alone do not cause colds; while closing the living-rooms against drafts favors the growth of bacteria. It is the stuffy, unventilated room that is largely responsible for colds. To exclude drafts is to live in a motionless moist air, poisoned with the noxious exhalations of those in the rooms. Treatment for colds should consist of a hot footbath at night, followed by a glass of hot lemonade and whiskey or hot milk. Keep the skin dry by frequent rubbing with a coarse towel, and remain indoors on a light diet for two or three days. When going out, do not bundle up the neck or wear heavy underclothing. An extra outer garment will be preferable. Exercise out of doors, deep breathing, temperate eating and drinking, plenty of sleep and cool, well-ventilated living-rooms night and day, ill ensure freedom from colds. Finally, quinine is not a cure or prophylactic for colds, and, if taken at all, should be taken only in small tonic doses.—Editorial in *The American Practitioner.*

G. H. JAEGER, a chiropractor in Columbia, has quit the business and agreed to cease attempting to befoggle the people, after the Boone County Medical Society had him arrested for practicing without a license. The jury convicted him on several counts and by compromise the others were dismissed.—*Jour. Mo. State Med. Assoc.*

Why can not West Virginia go and do likewise? Ritchie county has five "chiropractors" all at work and no one to molest or make them afraid. Simply because the medical laws of Missouri are better than the medical laws of West Virginia. Legislature of West Virginia, please take notice. G. D. L.

The West Virginia Medical Journal

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

Mr. Secretary: —Did you read our editorial of last month, entitled Stop, Look, Listen? If not, kindly do so before you lay this down. We have had but one response to it, namely, from Dr. C. W. Rexroad, Secretary of Ritchie County Society, who sends us a list of names of the non-members of that county whom it is desired to have as members. The list is fortunately short, as the society already has within its folds a large number of excellent men. Let us gather in all the worthy ones of the state. This cannot be done without the prompt and hearty co-operation of the local societies. Move at once and together! We will try to reach all the outsiders whose names are sent to us.

SPEAKERS' BUREAU OF A. M. A.

The American Medical Association, ever alive to the needs of the people, and recognizing the fact that they sadly lack an intelligent knowledge of many things having a bearing on their health and consequent prosperity and happiness, has, through the action of the Council on Health and Public Instruction, organized a Speakers' Bureau, and proposes to supply speakers free of expense to any community asking for their services. A number of physicians in many of the States have been induced to address the laity on various subjects bearing more or less directly on the public health and welfare. These speakers are generally men of prominence in the profession, teachers in colleges, sanitary authorities, and physicians and surgeons of more than local reputation. No expenses are guaranteed when a physician lectures in his own State, but when he is called into another State, generally by arrangements effected by a local committee, his hotel and traveling expenses are paid by the Council on Health, the money thus expended coming from a fund especially provided for this purpose.

A pamphlet has recently been issued by the Council giving the name of the lecturers and the titles of their addresses. As it may be of interest to the local societies of our State, we here give the names of those most convenient to us, with the subjects upon which they are willing to address the public. If there is in any community a demand for any of these men, the fact should be made known to the secretary of the Council on Health, No. 535 Dearborn Avenue, Chicago. At least a month's notice in advance of the contemplated meeting must be given. The local committee is charged with the very important duty—and one too often neglected—of working up an interest in the meeting; and it must pay all local expenses, as advertising, hall rent, etc. The public has too long depended for its information on medical or semi-medical topics upon the lectures of charlatans and imposters, and upon patent medicine almanacs and advertisements. Here is offered an opportunity to receive "the pure Gospel undefiled," correct, reliable and valuable information on many topics of vital interest, from the leaders of the profession who unselfishly give of their time and knowledge that the people may be properly informed on subjects of great importance. Let the people embrace the opportunity.

SPEAKERS AND SUBJECTS.

Dr. L. L. Lumsden, Washington, D. C.—

Typhoid Fever Prevention, Rural Sanitation, Prevention of Preventable Diseases.

Dr. Wilfred M. Barton, Washington, D. C.—Public Health Topics.

Dr. Thos. S. Cullen, Baltimore, Md.—Topics not given.

Dr. Lewellys F. Parker, Baltimore, Md.—Topics not given.

Dr. J. C. M. Floyd, Steubenville, O.—Causes and Prevention of Preventable Diseases.

Dr. Paul G. Woolley, Cincinnati, O.—How Do You Select Your Doctor?

Dr. W. J. Means, Columbus, O.—Public Health Topics.

Dr. Jos. J. Matthews, Louisville, Ky.—Marriage from a Sociological Standpoint.

Dr. W. L. Heizer, Bowling Green, Ky.—More Life.

Dr. E. G. Williams, Richmond, Va.—Public Health Topics.

Dr. A. E. Fullman, Richmond, Va.—The Farmer and His Health, the World of Little Things, Romance of Modern Medicine, Ancient and Modern Plagues.

Dr. Harry T. Marshall, University of Virginia—Infectious Diseases, Tuberculosis, the Social Evil, Pure Water and Sewage Disposal. S. L. J.

THE PROTECTION AGAINST THE VENEREAL PERIL.

The Utah State Medical Association has taken an advanced stand on this question. It has passed resolutions to the effect that they are in accord with the movement requiring all applicants for a license to marry to present a medical certificate showing him or her to be free from all venereal disease, said certificate to be sworn to by a licensed physician, who shall state that he has applied the recognized clinical and laboratory tests of scientific medicine, or, by a member of a state board of physicians to be appointed by the State Board of Medical Examiners, one of whom shall be located in each county, and to be filed with the license to marry. They urge a law to that effect.

Also, they favor by resolution, the asexualization of criminals convicted of rape, and the sterilization of criminals who by a succession of offenses, shall be deemed confirmed criminals, or "of confirmed criminal tendencies," as also those who by an established board of examiners, or a judicial authority, are found to be idiots, imbeciles, insane or epileptic, without probability of improvement.

It was also moved and referred to a special committee that the association favors a law making wilful communication of venereal disease a criminal act. Also another motion was offered placing the association on record as favoring a law controlling and regulating the sale of patent or other medicines claiming to cure gonorrhea, and that it be made a misdemeanor to post or place "dodgers" or other bills or literature in public urinals or other public or semi-public places. This was also referred to a special committee.

In 1911 Utah passed a law requiring the notification of venereal diseases. The basis of this law has been known as the "Utah Plan" and has been adopted by several of our states; New York and New Jersey being among the most recent to come into line. We can only hope and pray that the next session of the West Virginia Medical Association will profit by their example, or that some of our legislators next winter will consult medical authorities and start similar legislation in our state. G. D. L.

MECHANISTIC BIOLOGY, THE AWAKENING OF LIFE BY ARTIFICIAL STIMULI.

The origin of life is a subject alive with interest for the medical profession. The striking results reported by Carrel of the Rockefeller Institute in his attempts to keep tissues alive outside the body when preserved and nourished in suitable media, the pulsation of fragments of the heart, months after their removal from the warm body, all but startle us. *The New York Times* last summer predicted, editorially, that revelations were to come concerning life and its origin in chemical forces, from the scholarly essays to be presented before the British Association of Science at its annual session in Dundee, September 4. We have as yet seen no report from that meeting, but the following remarks of *The Times* are interesting:

"President Schafer, the physiologist of Edinburgh, will read the Presidential address on this subject, which has fascinated men's minds since the first inquiry into the possible relations of animate and inanimate nature.

"Prof. Jacques Loeb of the Rockefeller Institute for Medical Research replies to the vitalists, who deny that life can be explained in terms of physics and chemistry, by pointing to the fact that, twelve years ago, he caused the unfertilized eggs of the sea urchin to become swimming larvae by treating them with sea water, to which had been added quantities of salt or sugar. Six years later Prof. Loeb formed the so-called 'membrane of fertilization' in the egg of the California sea urchin by placing it in a solution of sea water and butyric acid. He subsequently developed starfish in the same way, and last year Prof. Betaillon, the biologist of Dijon, announced that by means of electric discharges and the application of the platinum needle to frogs' eggs, tadpoles developed without natural fecundation.

"Many other evidences of awakening into life by artificial stimuli will doubtless be presented by Prof. Schafer. Little by little, they have been accumulating as a result of discoveries by students of plants and animals. In an article printed last January in *The Popular Science Monthy*, Dr. Loeb asserted his belief that the contents of life, 'from the cradle to the bier,' its wishes and hopes, efforts and struggles, have their physico-chemical explanation. He cited a simple example in the tendency of certain animals to fly or creep to the light. This instinct is caused by the existence 'in their eyes (and occasionally also in their skin) of photo-sensitive substances which undergo chemical alterations by light.' The animal, just like certain heliotropic plants, is automatically forced toward the light. Dr. Loeb says:

"'Our wishes and hopes, disappointments and sufferings, have their source in instincts which are comparable to the light instinct of the heliotropic animals. The need of and the struggle for food, the sexual instinct with its poetry and its chain of consequences, the maternal instincts with the felicity and the suffering caused by them, the instinct of workmanship and some other instincts, are the roots from which our inner life develops. For some of those instincts the chemical basis is at least sufficiently indicated to arouse hope that their analysis from the mechanistic point of view is only a question of time.'

"This is the extreme view of mechanistic biology. It is not substantiated, as yet, by a chain of observed facts, but enough has been learned to justify the assumption that in it is at least something of truth."

F. LEM. H.

TUBERCULOSIS AMONG THE INDIANS.

Our former member, Dr. John N. Alley, has a very interesting paper on the above topic in a recent issue of *Northwest Medicine*, the Journal of the Washington, Oregon and Idaho Medical Societies. The doctor entered upon the work of relief of diseases among the Indians about eleven years ago. Soon finding tuberculosis to be a perfect scourge among these wards of the nation, he almost lone-handed started a campaign against the disease. After much discouragement his work was recognized by the government, and he was given authority to organize a sanitarium where the poor Indian could find a shelter and proper treatment. The work has been most successful, so much so that after investigation by a special commission, a recommendation for a large increase in the appropriation was advised, with a view to enlarging the institution over which Dr. Alley presides. This is a cause that should excite the active interest of the profession and the public, in the hope that the next Congress may be induced to grant an appropriation of $500,000 which the commission has decided to ask for. Tell your congressman about it, and let him know that a wise and active West Virginia physician is at the head of this beneficent work.—S. L. J.

MODIFIED MILK IN INFANT FEEDING.

The October issue of *Pediatrics* contains a paper giving a practical resume of existing knowledge upon the modification of cow's milk as a substitute infant food. The author has made a comprehensive study of the subject from all points of view, and dwells especially upon the value of cereal decoctions in the modification of cow's milk. In this issue there is given a short abstract from the paper, showing its scope and character. The practical nature of the paper will appeal to the general practitioner, and copies can doubtless be had of the author.

The Maryland Medical College is in danger of being put into the hands of a receiver, whose appointment was recently asked for by two former members of the Faculty, Drs. Love and Ulrich. A fraudulent issue of bonds is charged. These men say that they have recently been dropped from the Faculty without cause. Although there are some good men connected with this college, on the whole we see no very good reason for its existence. Baltimore has quite enough medical colleges without this one, probably the weakest. While desiring no misfortune to any individual, we rather rejoice at the diminution in the number of medical institutions. The fewer the

number the better will the quality be, and the higher the standard for graduation.

AS TO FEES FOR INSURANCE EXAMINATIONS.

DAVIS, W. VA., Nov. 15, 1912.

To the Editor:

It seems to me a word more to our members concerning insurance fees might not be amiss. It is this: if you are not getting $5.00 per examination, the chances are it is because you do not demand it. A number of instances have come to my attention where the insurance company paid $5.00 *when demanded;* otherwise $3.00. I have been in the habit of writing this to each company when I was asked to examine for them: "I will make application for appointment *if* you pay $5.00 as a minimum fee." I do not think any insurance company has turned me down on this account.

Recently a certain company sent me a check based on a less amount per examination. I wrote them among other things: "Please send me an additional check for $7.00. This is the rule of our medical society. It is not necessary to discuss the matter at all, it is $5.00 or nothing."

I got the $7.00 and a letter which said: "Through an oversight your account was credited with our *regular* fee.'" That is the point, they are paying those who demand it $5.00, others $3.00.

One company has made a specialty of misrepresentation. Their favorite plea is "Everybody's doin' it." This sometimes influences our weak brothers to break over. This very company, however, has lost out to a great extent in our territory. Another once powerful company has not had an examination for years in this territory, due in great measure, in my opinion, to the fight we have made agianst the low fees paid examiners.

Keep it up, we have already almost won out. Nearly all companies are paying the $5.00 fee. The others will if we but keep fighting.

A. P. BUTT, *Sec'y.*

W. B. Saunders Company, medical publishers, are now established in their new building on West Washington Square—an ideal site right in the heart of Philadelphia's new publishing center. The remarkable success of this house and the rapid growth of their business, with the increased facilities which this growth demanded, necessitated removal to larger quarters. They therefore erected a seven-story building, housing all their departments under one roof. This progressive company invites the profession to inspect the new plant.

SUPPRESSION OF TUBERCULOSIS.

In the registration area of the United States during the last decennial period, there was a decrease of 18.7% in the death rate from tuberculosis affections. During that period the yearly average of deaths from tuberculosis decreased from 1.969 to 1.603 per million of population. During the same time the general death rate declined only 9.7%, or from 16.550 to 14.950 per million. That is to say, some twenty lives are now being saved each year that ten years ago would have been lost through the ravages of tuberculosis. All of which speaks well for the anti-tuberculosis propaganda.

HOW THE RED CROSS SEAL ORIGINATED

"How did the Red Cross Christmas Seal originate?" is a question that is being asked by many during this holiday season when millions of these stickers are being sold all over the United States. To Jacob Riis, the well-known social worker of New York, and to Miss Emily P. Bissell, the energetic secretary of the Delaware Red Cross, jointly belong the honor of originating our American Red Cross Christmas Seal. In 1909 Mr. Riis' interest was aroused by the receipt of a Christmas tuberculosis stamp on a letter from Norway. He published an article about this queer-looking stamp in the *Outlook*, and suggested some possible uses for it in this country. Miss Bissell at once saw an opportunity here and prepared a stamp, from the sale of which her society realized $3,000 for tuberculosis work. So impressed was she with this success that she induced the American Red Cross to take up the sale in 1908 on a national basis. With very little organization and with hardly any attempt at careful advertising, the sale that year brought in, nevertheless, over $135,000 for anti tuberculosis work in various parts of the United States. In 1909, with more thorough organization, the sale was increased to $230,000, and in 1910 to nearly $310,000. Last year the sale increased to over $330,000, or 33,000,000.

While our own Red Cross Seal dates back only four years, "charity stamps," from which this idea originally sprung, go back to 1862, when "sanitary fair stamps" were first used in Boston to secure money for the care of soldiers wounded during the Civil War. Nearly $1,000,000 was raised in this way during the years 1862 to 1865 After the wa rthis method of raising money was discontinued in this country for a generation, although it found vogue in Portugal, Switzerland, Austria, France, Spain, Denmark, Norway, Russia, Sweden and other European countries. There are now hundreds of different types of charity stamps used in all parts of the world, as many as forty being used in Austria for children's hospitals alone.

Stamps or seals were first used to get money for the anti-tuberculosis crusade in Norway and Sweden in 1904. It was from one of these stamps that Jacob Riis and Miss Bissell received their ideas for our own Red Cross Christmas Seal.

THE SOCIAL EVIL AND THE SALOON.

Close Relationship Existing Between the Two as Evidenced by the Report of the Chicago Vice Commission.

Few reports ever made by committees or commissions have stirred the country and caused

such general discussions as that of the vice commission of Chicago which was made this spring to the mayor and council of that city. The high character of the men who compose the commission, the thoroughness of their work and the awful results of their investigations caused the country to gasp in wonderment that in civilized America such conditions can be permitted to exist.

Early in 1910 Dean Sumner read a paper before the Chicago Church Federation on the Social Evil Problem in Chicago which created so much interest that a committee was appointed to call upon the mayor to appoint a commission to thoroughly investigate the social evil in Chicago. Finally such a commission was selected, council appropriated $5,000 for its use for 1910, and the work was begun, the commission having the assistance of a number of the most experienced investigators to be found in the city and country. The commission was composed of many of the best known citizens of Chicago, some of them known not only throughout the country but whose names are familiar wherever the English language is spoken.

The first report of the commission was made this spring and it startled Chicago and the country. This report is voluminous, containing nearly 400 pages, and every page is startling and uncovers conditions which seem impossible in any American city, and yet conditions which probably exist to a degree in every city in the country.

In this report the public has its first conception of the extent of the social evil in Chicago, the close alliance between this evil and the saloons, and the devilish business and extent of the white slave traffic. What Chicago has endured and is enduring is going on in other cities of the Republic, and all these cities need commissions such as Chicago, that the people may be aroused to conditions, and, once aroused, may make these conditions better.

In the commission's investigation it quite naturally found that the most conspicuous and important element in connection with the social evil is the saloon, and the most important financial interest, next to the business of prostitution, is the liquor interest. The report of the commission declares that "as a contributary influence to immorality the saloon is the most dangerous and powerful interest in Chicago."

In Chicago, as elsewhere, the brewers made many promises to eliminate the evils connected with the business, but many of the disorderly saloons in which immoral women are permitted and protected are under control of brewery companies and brewers sell their products to disorderly saloons they do not own and control.

There are more than 7,000 saloons in Chicago—one to each 300 population. The license fee is $1,000 a year. The report shows that brewers are buying up licenses of disorderly saloons at big premiums, because of the profits, and then conducting them in the same disorderly manner.

An investigation of 236 disorderly saloons, that is, places harboring and catering to immoral women, showed that representatives of fourteen brewing companies are on the bonds of sixty-three of these places. Of course, there are scores of such places which were not investigated.

During the period of the commission's investigation conditions were considered in 445 saloons in different parts of the city. In these saloons investigators counted 928 unescorted women who by their actions and conversation were believed to be immoral. Saloonkeepers often issue cards for distribution, the language suggesting the kind of places conducted. Women are urged to work in saloons soliciting drinks from frequenters, and are paid a commission on intoxicants they succeed in selling. The big profits from sales in such places have attracted the cupidity of the brewers. The sale of beer in rear rooms of these saloons makes a profit of 180 per cent. to the proprietor. The margin of profits on drinks sold in rooms above the saloons is 360 per cent. Proprietors and bartenders in many saloons aid in securing women for immoral purposes, and disgusting and immoral entertainments are frequently given while the midnight closing and other laws are continually violated.

Throughout the report the commission shows a close connection between the saloon and the social evil. The one is the counterpart of the other. They flourish together. The saloon not only feeds its victims into immoral houses but hundreds of saloons are nothing more than bawdy houses with bars attached. To make a winning fight against the social evil war must be carried on against the saloon.

Flatter not yourself that such conditions as exist in Chicago do not obtain in your city. You may live in a smaller town, but if you have the saloon and the saloon gang, it follows as night follows day that you have the social evil organized, encouraged and protected—American Issue.

WHAT EVERY WOMAN SHOULD KNOW TO PROTECT HERSELF FROM DEATH BY CANCER OF THE WOMB.

The committee appointed by the New York Obstetrical Society to draw up a paper on this subject presented recently the following:

1. Cancer of the womb is at first a local disease.

2. Thus far the only reliable cure is operation, but, in order that the operation may be attended with best results, it must be done early.

3 .Hence the great importance of detecting cancer of the womb at its very beginning.

4. There are no positive signs of the onset of the disease, but there are symptoms which are suggestive and should lead the woman to consult reliable medical authority.

5. The most important of these is a blood or a blood-tinged discharge occurring independent of, or at other times than the monthly period. This staining or spotting may be brought on by exertion or slight injury, as intercourse, or the introduction of a douche nozzle. The discharge may, at times, be thin, pale yellow or watery.

6. Any change in the monthly period of a woman, at any time of life, demands examination, particularly if it occurs at the time of the change of life.

7. Regarding the menopause (change of life,

a harmful error is common among women and is even shared by not a few physicians. It is thought that the change of life is naturally accompanied by excessive flow at the monthly periods and that there may be a flow, even between the periods. Such an opinion is totally wrong. The natural occurrence at the change of life is a decrease of the flow with longer intervals between the periods until they cease entirely. Hence any increase in the amount of the flow, or any increase in its frequency, is wrong and demands the most careful investigation.

8. This excessive bloody flow, or too frequent flow, or a watery discharge, does not always mean cancer. It may be due to other causes, but often this can be known only by a scraping and a microscopical examination of the scrapings or of the so-called ulceration of the neck of the womb. Hence any offhand statement, even by a physician, that the irregular flow has no significance should not be heeded.

9. Too great emphasis cannot be laid upon the two foregoing paragraphs, for many a life has been needlessly sacrificed by the opinion that the menopause (change of life) is naturally accompanied by all kinds of discharges and bloody flows.

10. Pain and loss of flesh and strength are not early symptoms of cancer of the womb. They may not even be present when the disease is well advanced.

11. Women of all ages may develop cancer of the womb, but it is most common between forty (40) and fifty (50).

12. The actual cause of cancer of the womb is still unknown. But it is known that constantly kept up local irritation may lead to the development of cancer. Hence a woman should not neglect the attention of injuries or any local disorder of her generative organs.

State News

REMOVALS—Dr. G. O. Gautier, late of Curtin, has located in Frametown.

Dr. D. R. Bushong, late of Charles Town, has removed to Hagerstown, Md.

Dr. B. H. Dunn, formerly located in Huntington, has gone to Williamson, W. Va.

Dr. D. G. Musgrave has recently removed from Standard to Pt. Pleasant. Doctor, see if you can not resuscitate that Mason County Medical society. It is too bad that the live ones must go to Cabell County for inspiration in their work.

Dr. C. E. Wilkinson, of Brandonville contemplates soon removing to Terra Alta.

Dr. W. J. Judy is in Lousisville taking special post graduate work in diseases of the stomach and intestines. Last winter the doctor spent several months in the same city engaged in similar studies. He expects later to go to Chicago for a similar line of work.

Dr. R. M. Stone, secretary of the Little Kanawha and Ohio Valley Society, is convalescing from an attack of typhoid fever. The doctor was on duty with the militia. When he entered on this duty he had received one injection of antityphoid serum, but failed to receive the two others that are usually given.

Dr. H. D. Price, W. S. Keever and G. D. Jeffers, of Parkersburg, attended the surgical clinics in New York last month, and are remaining for some time at post graduate work.

Dr. Rolla Camden, of Parkersburg, is in Philadelphia for post graduate work, after which he will locate in Washington City, and will specialize in diseases of the intestines and rectal surgery. He will be missed and his friends hope that success will result from the change.

Dr. Wright, formerly practicing in Parkersburg and more recently in Grantsville, has returned to Parkersburg to resume practice there.

Several new dentists have, during the past year, located in Parkersburg.

A recent analysis of the water at Parkersburg shows a very satisfacotry condition. The city is building a large reservoir, and hopes to have the water system completed this fall. W. H. S.

We regret to learn that one of our members, Dr. Hoffman, of Thomas, has been sued for alleged malpractice. This is the first suit instituted since the State Association adopted the malpractice defense plan. We sincerely hope the suit will, like all others entered during many years past, utterly fail in its purpose. Most of such cases are blackmail, pure and simple.

DEATH—Dr. J. W. Abercrombie, a most estimable member of Ohio County Society, recently died at his home in the suburb of Warwood, of which he had not long before ended a term as mayor, the first the town has had. The following resolution was adopted by the County Society:

The Ohio County Medical Society desires to bear testimony to its appreciation of the life and character of its late member, Dr. J. W. Abercrombie, whose death we deplore. Our affiliation with him for a number of years has shown him to have been a man of the finest christian character, a physician of more than ordinary ability, and a man who was always affable in his social relations. His professional conduct was ever strictly ethical, and his every act most honorable. We commend his character and career as worthy the emulation of all men engaged in the practice of the noble profession of medicine. We recognize the death of Dr. Abercrombie as a distinct loss to the profession of which he was are honored member and to the community which he served and by which he was held in highest esteem.

S. L. JEPSON, J. G. WALDEN, W. S. WEBB.
Committee.

Society Proceedings

AMERICAN PROCTOLOGIC SOCIETY

THE SURGERY OF COLONIC CONSTIPATION—By LOUIS J. HIRSCHMAN, M.D., of Detroit, Mich.—After presenting the histories, radiographs and reports of operative treatment of thirteen cases of obstipation due to colonic obstruction, dilation, stricture and adhesions, Dr.

Hirschman has formulated several principles in dealing with his cases requiring colonic surgery. They are epitomized in the following conclusions:

1. Most cases of chronic constipation are colonic in origin and many are obstructive in type.

2. Many cases of so-called chronic constipation are therefore really colonic obstipation.

3. Many cases of colonic obstipation suffer from chronic dilatation of the colon, with or without ptosis.

4. Radiography is a most vital necessity in the diagnosis of all cases of chronic interference with bowel function. Its negative value may be greater than its positive.

5. A chronically over-distended colon, whether adherent or not, never again becomes a normally functionating bowel.

6. Intestinal adhesions usually tend to recur in increased intensity and adhesions only cause symptoms when put under stress or tension.

7. The prevention of tension in physiologic rest to the affected organ and colonic rest is obtained only by colectomy, colostomy or exclusion.

8. Colectomy as advocated by Lane is an operation seldom advisable and has many obvious objections from the standpoint of patient and physician. It is too grave a procedure to be undertaken except in the most aggravated cases.

9. Strictures, neoplasms and other obstructions should be removed by excision of the diseased tissue and lateral anastomosis of the bowel.

10. Exclusion by ileo-colostomy is safe, easy to perform and most satisfactory in the restoration of normal peristalsis and consequently normal health.

11. Results speak more eloquently than words. After an experience with nearly fifty cases requiring exclusion or resection of the colon for obstructive constipation with but one failure, I feel fully justified in recommending it to your careful consideration in all cases of aggravated colonic obstipation, whether congenital, post-operative or dependent on some mechanical obstruction or narrowing of the bowel.

THE ROENTGENOLOGIC METHOD OF EXAMINING CASES OF CONSTIPATION AND OBSTIPATION—A METHOD OF VISUALIZATION OF ABDOMINAL LESIONS OF THE INTESTINAL TRACT—By ARTHUR F. HOLDING, M.D., of New York City.—The author noted that current text-books on diagnosis written by eminent authorities are still copying cuts which were drawn by some artist rather than by an anatomist. Let us hope that the striking proof furnished (by the X-rays) of the fallacy of such teaching will be effective, and perhaps not one of the least results will be to cause true illustrations to be placed before our students' eyes.

The normal position of the colon and the parts of the intestine that can ordinarily be visualized by means of bismuth ingesta and the X-rays are: (1) The first portion of the duodenum, (2) the jejunum, (3) the ileum, (4) all parts of the colon. In some cases the second and third portions of the duodenum and the appendix can be visualized.

The accuracy, reliability and interpretation of findings by this method, however, may well receive our careful attention.

In the first place this method does not cause gastro-intestinal symptoms, such as nausea, vomiting, diarrhea, constipation, gastro-intestinal or general symptoms, other than are present when buttermilk alone is ingested; it is therefore logical to assume that the buttermilk-bismuth mixture does not irritate the mucous membrane and gives a true picture of the motor activities of the patient's intestines.

By fluoroscopy and by radiography in the erect or prone positions, or both, an accurate outline of the lumen of the tract can be obtained, especially where there is any obstruction to the onward progress of the intestinal contents. The individual peristaltic waves can be accurately registered on a special photographic emulsion that is far more sensitive than the human retina and the progress of the peristaltic waves can thus be seen functionating under normal conditions, the patient and his abdominal contents not relaxed by a general anesthetic; the secretions and motility not disturbed by the presence of an irritating foreign body such as a stomach tube; the conclusion not based on inference deduced from chemical reactions of juices obtained by abnormal and irritating measures. The organic outline obtained in X-ray plates is even more conclusive and reliable than the information obtained by the sense of touch, whether that be applied over the intact abdominal wall or to the viscera laid bare by an exploratory incision. The radiographic emulsion and the retina are the two most sensitive methods of observation possessed by man, far outranking in their acuteness either the drum membrane or the sense of touch. It has been contended that the abdominal operation was more accurate than an X-ray examination, because it laid bare the "naked truth." The finality of this argument is based more on the sound of the words than in fact, as any one knows who has had an opportunity to use both methods on the same case.

On the other hand, there is great danger of arriving at wrong conclusions in using the X-ray method, especially when the examination is based on too few plates or is only an examination of a suspected part of the 30 odd feet of intestinal canal.

We must not let seniority interfere with our recognition of the superiority of methods employed by us for diagnosis. No progressive proctologist or surgeon should depend on any one method, but should use them all in examining cases, and in obscure cases he should not hesitate to insist upon supplementing the more common methods of examination with a radiologic examination, regardless of the expense involved.

The various lesions and conditions that have been successfully shown by the X-ray method are atonic and spastic constipation; congenital

anomalies of the tract, such as non-rotation of the cecum and narrowing or insufficiency of the ileo-cecal valve; adhesions, kinks, with or without adhesions (including Lane's); ulcers, tumors within the canal and tumors pressing upon the intestines from without.

It must be borne in mind that a palpable tumor disappearing after the administration of an enema or a cathartic, even if followed by improvement in the patient's condition, is not proof that the tumor was feces.

The Roentgenologic method of clarifying difficult conditions present in patients will no doubt be gladly welcomed and widely utilized by surgeons, who, as a class, deserve our greatest respect and admiration for their courage in attacking many ordinary undiagnosible conditions by cutting boldly into the abdomen and making their diagnosis by inspection and thereupon instituting impromptu surgical procedures in order to correct the conditions found. Many times the condition found within the abdomen is entirely dicerent from that which was expected. When these difficult situations can be accurately known before the operation is begun; when the surgical procedures can be accurately predetermined; when much time (previously lost exploring the abdomen) can be saved; when the duration of the patient's anesthesia can be proportionately shortened; when the surgeon will be saved the tremendous nervous strain and responsibility of emergency decisions and procedures, the surgeon must recognize that his operative statistics will necessarily be better, his patients are going to recover more quickly and more of them will recover, and finally the years of a surgeon's own life and usefulness will be increased.

The only great draw-back to the general adoption of this method is its necessarily great expense.

PATULOUS ANUS: ITS CLINICAL SIGNIFICANCE—By ALFRED J. ZOBEL, M.D., of San Francisco, Cal.—The condition of patulous anus results from an abnormal loss of tone in the sphincter muscles, which may be due to either a fault intrinsically within the muscle or to some disturbance in its nerve supply. When purely muscular the cause may be a direct injury to the muscle; an infiltration by a malignant or a syphilitic growth; a participation in a general muscular weakness or the presence of a foreign body in the rectum which prevents the muscle from completely contracting. When the nerve supply to the sphincters is at fault the causative lesion may be either central or peripheral.

Complete fecal incontinence does not necessarily follow when the anus becomes patulous. The external sphincter, when but slightly affected, sometimes is assisted in performing its function by an extra effort of the will and through augmenting the muscle's action by strongly contracting the Glutei muscles and bringing them together.

A brief report of a few very interesting cases of patulous anus is given to illustrate the different causes of this condition, among them being a case of infiltration of the sphincters by a carcinomatous growth low down in the rectum; a case, the result of pederastic practices; a case, the result of a participation in the general alcoholic neuritis; cases where it occurred in low intussusception of the bowel in children, and two cases where it appeared as one of the early signs of locomotor ataxia.

THE CABELL COUNTY SOCIETY.

HUNTINGTON, W. Va., Nov. 15th. 1912.

Dr S. L. Jepson, 81 Twelfth St.,
Wheeling, W. Va.

Dear Doctor Jepson:—The regular monthly meeting of this Society was held last night at the Hotel Frederick. The evening's work consisted of the presentation of a patient by Dr. Moore and case reports by various other members present.

Dr. G. B. O'Roark, of Huntington, was elected to membership and the applications of Drs. H. A. Barbee, Pt. Pleasant; J. W. Rife, of Kenova, and A. U. Tieche, of Huntington, were presented After the evening's work lunch was served in the cafe.

Fraternally Yours,
JAS. R. BLOSS,
Secretary.

LITTLE KANAWHA AND OHIO VALLEY SOCIETY

PARKERSBURG, W. Va., Nov. 13, 1912.

The L. K. and O. V. Society met at the Chancellor Hotel, Nov. 7, 1912. Pursuant to an arrangement made with the H. K. Mulford Co., Dr. E. H. Miller, of Philadelphia, who is on the staff of their laboratories, accompanied by Mr. L. H. Glickman, assistant, was here to demonstrate by stereoptican views biological preparations, how prepared, and miscroscopic views of disease germs, the results obtained in treatment from numerous authorities, and we had sent out to neighboring physicians in adjoining counties and this city some 85 cards of invitation. We had in attendance some 40 or 45, gathered to hear Dr. Miller's excellent address in which he briefly gave us a birds-eye view of the subject of serum, vaccine, and anti toxic therapy. This address ocupied about an hour and a quarter in time, after which the speaker answered the numerous questions put to him by his interested listeners. Of course, it is impossible to give an adequate synopsis of this paper.

A vote of thanks was given to Dr. Miller and Mr. Glickman, also, to the Mulford company for the courtesy extended to us. Dr. Miller in closing, alluding to the marvelous advances made in surgery during the past fifty years, predicted that in the coming 50 years an equal, if not greater advance would be made in the treatment of infectious diseases, and their prevention by modern methods with biological products discovered in the laboratory.

The president announced that the essayists for the December meeting were Drs. L. O. Rose and L. F. Keever. After some further routine

business the members repaired to the dining room where an appetizing banquet was spread. All voted the meeting had been a success. Our secretary pro tem. prepared a short synopsis of the paper which was published in the Evening Sentinel a day or so after.

W. H. Sharp, *Secy., Pro Tem.*

OHIO COUNTY SOCIETY.

October 28th—Society met with President Schwinn in the chair.

Dr. Ackerman presented a case of syphilis of the innocent, the lesion being on the tonsil. The child contracted the disease from a wet nurse, and the father got a chancre on the lip from his child. Would not advise removal of the tonsil in this case. Dr. Weinberg exhibited a case of syphiloma of the testicle, and said these were of two types, gummatous and interstitial. He discussed the diagonsis between tuberculosis and syphilis of the testicle.

The paper on "Tumors of the Testicle' was read by Dr. Caldwell. He first treated of tuberculosis of the epididymis and testicle. Said it was miliary generally, or localized, the latter type being of surgical importance. The pathology of tuberculosis of the epididymis was then discussed But little tenderness at first, later a hard, elongated, nodular swelling which may develop into an abscess. Sometimes sinuses. The doctor then took up the diagnosis between gonorrheal and tubercular epididymitis, and between tuberculosis and syphilis of the edididymis. Treatment: Hygienic, internal and surgical. Incise and drain after abscess has formed. Remove both testicle and epididymis. Hernia, fungus testis, sarcoma, were all discussed. A specimen of tuberculosis of testis was exhibited. Paper was discussed by Drs. Hupp, Ackerman and Noome.

Nov. 4th — Regular meeting with President Schwinn in the chair; 31 present.

Dr. Quimby presented a case of angio-keratosis, with history and pathology of the lesion. Dr. McLain, Health Commissioner, read a paper, "Observations on Diphtheria." Said we had in 1912 145 cases, with a mortality of 8 27. To date this year 148 cases, with 12 deaths, 8 from laryngeal disease. In the past five years there had been 55 deaths from this disease in the city. The doctor discussed the importance of cultures in doubtful cases, the manner of taking cultures, the characteristics of the bacillus diphtheriae, etc. The doctor spoke of the persistence of the bacilli in the throat after the disappearance of the membrane. Under the law the minimum time for quarantine is ten days. Immunizing doses of antitoxin were urged.

Dr. Drinkard, recently appointed Medical Inspector of Schools, discussed this subject, and gave some very interesting facts drawn from his work. Poor eye sight he found a very common cause of the children failing in their school work. He had already found three incipient cases of diphtheria in the schools and sent them home for treatment. In all cases found in any way defective, he urged treatment by the family physician. Following this rule of the School Board, there was never any occasion for friction between the family physician and the medical inspector.

Dr. McLain's paper was discussed by Dr. A. Wilson, who urged physicians to get the aid of the Health Department in the diagnosis of obscure cases of throat disease. Also urged the early and free use of antitoxin, and that every case should be kept in bed at least a week after the disappearance of the membrane of diphtheria, and two negative cultures should precede the lifting of quarantine. Dr. Fulton suggested the fumigating of school rooms. Said that if proper isolation is enforced, immunizing doses of antitoxin are not needed. Dr. Reed suggested that the sanitary condition of the schools are under the care of the inspector. The teachers of the city have been instructed by lectures of physicians of the city prior to the appointment of an inspector, and are co-operating intelligently with the inspector. Dr. Weinberg reported a bad case of acute rheumatism successfully and promptly cured by phylacogen. Presented some literature on the subject. Discussed by Dr. Ackerman—who confirmed Dr. W's report of the case, and by Drs. Jepson and Schwinn. Adjourned.

Nov. 11th—Dr. Baird in the chair. Dr. Jepson read a paper on "Child Welfare." He took up the unfitness of many parents, and said this is a better age for babies than any that has preceded it, because of the efforts to protect babies now being made all over the world. Spoke of heredity, and importance of choosing proper grand parents. Favored certificates of health from those seeking marriage license. The child offers the best field for preventive medicine. Urged vaccination, antitoxin, silver nitrate in eyes of al infants, school inspection, avoidance of alcohol by parents, the improvement of the environment of children. Discussed by Drs. Megrail, Taylor, Jones and McLain.

Dr. Hupp reported a case of subarachnoid cyst cured by Cushing's operation. Discussed the diagnosis of intra-cranial lesions. The case was discussed by Drs. Kelly, Aschman, Fawcett and Hildreth III. Drs. Jepson, Walden and Webb were appointed a committee to present resolutions on the death of Dr. Abercrombie. Adjourned.

Burns, *Secretary.*

Reviews

TEXT BOOK OF THE PRACTICE OF GYNECOLOGY, for practitioners and students by Wm. Easterly Ashton, *M. D., LL. D.*, with 150 new line drawings ilustrating the text. Fifth edition thoroughly revised. W. B. Saunders Co., Phila.

That this is a popular work is shown by it having passed to the fifth edition in a few years. The author believes it is best to give full directions—acompanying them with very numerous illustrations—describing each disease of the various organs peculiar to women(and many that are common to the sexes) with explicit descriptions of all operations, together with details of all instruments needed (the latter fully illustrated) So this becomes an almost illustrated encyclo-

pedia of the subject. The arrangement is excellent in describing symptoms and points of importance. The use of larger type emphasizes this, so as to impress the mind of the general practitioner and student for whom it is specially designed. The work is so thorough and brought up to date that all the latest modes of surgical treatment are presented for the class mentioned, whether practicable for them or in their reach or not. However, looking over the work one is struck with the little space given to medical treatment. This must be sought elsewhere For instance, in the chapter on displacements very little space is given to the subject of the pessary Only two or three forms are described for all forms of displacement.

Many subjects are included in this work which show how far the Gynaecologic Surgery has advanced upwards into territory that had been supposed to belong to General Surgery. Full descriptions are given for the treatment of diseases of the kidneys, preters, the appendix, resection of the intestines, almost everything up to the gall bladder, spleen and stomach. For all these operactions full descriptions of technic, instruments, and treatment are given. Quite a large number of conditions and operations are described not generally treated in similar works. For instance, varicose veins of vagina and descriptions of operation for same. One very commendable feature of the work is that the author does not embarrass the practitioner with descriptions of operations by numerous others, but confines himself mostly to the procedure he has found most satisfactory. Like most of the later works on this subject there is no mention of diseases of the female breast. Certainly the diseases of this organ should be included. As before noted the book is very profusely illustrated. To the mind of the reviewer very many of these are superfluous and only serve to make the book more unwieldy. But taken all in all this is a good book and can be recommended to the general practitioner as a good guide in this very important subject. The work of the publisher is excellent as we should expect from that well known house

—W. H. S.

PRINCIPLES OF HYGIENE—For Students, Physicians, and Health Officers. By C. H BERGEY, *M. D.*, First Assistant, Laboratory of Hygiene and Assistant Professor of Bacteriology, University of Pennsylvania. Fourth edition thoroughly revised. Octavo of 529 pages, illustrated. Philadelphia and London. W. B. SAUNDERS COMPANY, 1912. Cloth, $3.00 net.

For more than ten years this work has been before the profession and has stood the test of long use. It has always been considered one of the very best books on the subject, and our examination convinces us that it is especially valuable for the general practitioner every one of whom should have at least one work on hygiene and preventive medicine. The introduction deals with the general causes of disease. Following are chapters on the Air, Ventilation, Heating, Water and Water-supply, Sewage disposal Garbage disposal, Food and Dieting, Exercise, Clothing, Personal, Industrial, Military and Naval Hygiene, Disinfection, Quarantine, Vital Statistics etc. The whole field is well and briefly covered. The book is well illustrated, and its mechanical execution is excellent. As the latest word on preventive medicine we cordially commend this book.—S. L. J.

HIMSELF—Talks with men concerning themselves. By DRS. E. B. LOWERY and RICHARD J. LAMBERT. Chicago: Forbes & Co.

We have recently read and reviewed in these columns several books in this series of sex hygiene by Dr. Lowry. This is the latest book and first addressed to men. Here is given much information which every man should know concerning the sex organs, their functions, diseases, hygiene, etc. Useful information is imparted on the subjects of hernia, constipation, sleeplessness, etc. A sensible chapter is given on marriage, the rights and duties of husbands, etc. The question of eugenics is touched upon. Altogether the book, like its predecessors, is calculated to do much good if widely distributed among men who greatly need such instruction.

Medical Outlook

CANCER OF THE UTERUS.

Dr. Stacy of the staff of physicians of the St. Mary's hospital, Rochester, concludes his paper on Uterus Cancer as follows:

1. Cancer in its early stage is removable and hence curable.

2. Cancer of the uterus usually gives symptoms in that early, operable stage.

3. Most deaths from cancer are due to delay either on the part of the patient or of the physician first consulted, and are therefore unnecessary.

4. The laity should be made to realize that any irregular flow, a constant bloody discharge, or a watery discharge are not due to "change of life," but, in practically all cases, mean malignancy.

5. The laity must be taught that cancer is curable if operated early, i. e., while still a local disease.—F. L. H.

CASE OF POISONING BY TINC. IODINE

I had a case of iodine poisoning which I think was saved by apomorphine Mrs. D., while intoxicated, swallowed with suicidal intent, nearly two ounces of tincture of iodine. I was at her side in 15 minutes. She would not swallow medicine nor even water. I had two stout men hold her while I injected 1-10 gr. apomorphine into her arm. In less than three minutes she vomited a dark blue liquid, the iodine and starch which remained in the stomach from her last meal. Then as I left the room I remarked to the attendant: "don't let her have water" I had scarcely left the room until she called for water I had whispered to attendant to let her have it She vomited again. Throwing out a slightly colored liquid thus washing out the poison. She made a rapid recovery. G. D. LIND, *M. D.* Greenwood, W. Va.

SURGERY OF GOITER.

ARNOLD SCHWYZER, *M. D.* of St. Paul, has quite an extensive illustrated paper in the *Journal-Lancet* of Oct 15th, having been read at the Minnesota State Medical Association meeting in August and which he modestly entitles Surgical Notes on Goiter. Schwyzer operated on 92 cases, 39 for exophthalmic, 51 for non-exophthalmic and 2 for malignant goiter, with 3 deaths due to hyperthyroidism and one to bronchoblennorrhea following intubation. He refers to a case reported in *Annals of Surgery* in which an operation was performed for injury to the recurrent laryngeal nerve. The two cut ends were found and sutured with good results and it was declared to be the only case of its kind on record. Schwyzer operated upon a similar case in which thirteen months previous an able surgeon had performed a thyroidectomy for exophthalmic goiter. Immediately after awakening from narcosis the patient and relatives declare the voice was entirely gone. In thirteen months the voice remained whispering. Schwyzer's operation consisted in cutting down, finding the severed ends of the nerve and ligating them. He found the first surgeon had removed a half inch of the nerve along with the goiter. A peculiar point about the operation was that he worked under a large lens held by an assistant. The patient, a school teacher who had lost her position in consequence of the first operation, was so completely restored that she regained her position as teacher.—G D. L.

BLOOD-LETTING IN A CASE OF PUERPERAL EXCLAMPSIA.

Dr. John F. Moran, Washington, D. C., reports in the Medical and Surgical Society of D. C., and published in *Virginia Medical Semimon*, a case of post-partum eclampsia very severe, treated by blood-letting with complete success.

Frequent urine analysis had been made previous to confinement and albumin found. Labor perfectly normal. Loss of blood in labor very scant. Only one vaginal examination and that when head was on pelvic floor. No anaesthesia during labor. Labor ended at 1:30 p. m., at 7:30 p. m., sever headache, pulse very full, at 8:30 p. m., a convulsion, unconscious, lasted short time. Hot pack given and perspiration free. Urine voided several times and bowels moved twice. 23 hours after first convulsion others occurred at intervals of 5 to 10 minutes. Pulse 80 and coma profound when it was decided to bleed. 20 ounces was taken from median basilic. Convulsions, 10 in number continued throughout the venection. Coma profound and edema of lungs marked. Pulse 144 and blood pres. 120 half hour after venesection. Hot pack at onset of convulsions and two hypodermics of 1-4 gr. morphine. Salt solution per rectum, by slow method. Patient began to improve and next morning 22 ounces urine was removed with catheter and showed marked albumen. The next catheterization about six hours later showed only faint traces of albumen. The mind soon became clear and convalescence was rapid. The doctor thinks that the small amount of blood lost during delivery was significant. He makes also the point that the absence of the usual manifestations of impending eclampsia save the presence of albumen and increased blood pressure emphasizes the importance of a routine examination for more danger signals in every case of pregnancy.—G. D. L.

THE DIAGNOSIS OF NEPHRITIS

William Engelbach, M. D., of St. Louis, in a paper read before the Missouri Medical Association and published in their journal arrives at the following conclusions:

1. Urine analysis alone is no criterion for the lesion or function of the kidney.
2. In many cases of nephritis having marked urinary findings, the function of the kidney is not greatly diminished.
3. In probably 50 per cent of the cases of secondary contracted or interstitial kidneys in which the urine may be practically normal, there is a marked decrease of renal insufficiency.
4. A diagnosis of nephritis or exclusion of such diagnosis should never be made on the urinary fiindings alone.
5. Secondary changes in other organs due to nephritis are frequently disgnosed and treated as the primary lesion .
6. Complete general and physical examination, functional tests of the kidney, the course and the reaction to treatment should all be given consideration in the diagnosis of this disease. — G. D. L.

GOOD ADVICE.

"One of the difficulties which physicians now and then encounter when they appear in the role of expert is due, first, to the lack of knowledge of the nature of evidence and, secondly, to an inability to translate technical terms and expressions into every-day language, such as the jury can readily comprehend. If the doctor has made a clinical examination or perhaps a chemical analysis, he should confine himself to the mere enumeration of facts and to a logical deduction based on these facts. He should never indulge in generalizations, nor should he cite illustrations which may or may not have a bearing on the case in question. Least of all should he deal with facts, which he has not observed existing in the case before him."—F. X. DERCUM, *M. D.*, in *Pennsylvania Medical Journal. Nov.* 1912. — G. D.L.

APPENDICITIS—EARLY DIAGNOSIS

At the recent meeting of the British Medical Association at Liverpool, Dr. William Ewart, of London, read a most helpful paper on the preoperative diagnosis of appendicitis.

The practical conclusions caimed to have been established by an extensive clinical investigation and by confirmatory surgical test cases are given where the dorsal method of examination is used, providing as claimed by Ewart, normal "standard" physical signs for the healthy abdomen, and abnormal "localizing physical signs" particularly for the retrocecal lesions. Anterior palpation of the approaching septic abdomen is good as far as it goes, but the added suggestion of the essayist widens materially the objective range thus

strengthening and clinching the preoperative diagnosis. "It is the only available test (1) for the normality of appendical district, and (2) for the post-operative results of surgical interference, whether completely successful, or sometimes calling for a secondary operation. (3) It is unique in supplying direct localizing evidence in the large group of rectocecal lesions, which are inaccessible to preoperative diagnosis even by *x*-rays; often also in the pelvic and sometimes in the central lesions.. (4) Except in the anterior group in appendicitis, hitherto the only group of physical signs, it is the only objective evidence for deciding at once the urgency of operations which at present are undertaken for existing symptoms; and (in their absence) the expediency of operations now justified by nothing else than the plea of safety. (5) It has a direct bearing in all cases upon the modus operandi; not only in the deep seated and posterior ones; but particularly in the anterior ones, where it is capable of settling any doubts as to the management of the retrocecal field. (6) It is indispensable for certificates of appendical soundness, and of a perfectly normal result after operation; (7) for the decision as to an operation in all subacute, latent, or doubtful cases; and (8) for the most satisfactory operative management of severe cases. With exceptional reservation a dorsal examination should never be omitted as an essential part of the routine of surgical preoperation diagnosis."—F. L. H.

PREGNANCY IN BOTH TUBES.

Davidsohn, *Munchener med. Woch.*, January 16, 1912, reports a case in which an extrauterine pregnancy of equal age was present in each Fallopian tube in a woman thirty years of age, who had had two children and one miscarriage. About six weeks after her last period the woman suddenly went into collapse and a diagnosis of ruptured ectopic having been made an immediate laparotomy was done. Each tube was found to contain an ovum but only one had actually ruptured, the other one being in the process at the time of operation. The patient developed septic peritonitis and died. The case is noteworthy because of the early date at which rupture occurred and shows the necessity of careful examining both tubes in every case of diagnosed ruptured ectopic.—*Jour. N. Y. Med. Asso.*

MIGRATION OF CONSUMPTIVES DISCOURAGED.

Physicians in all of the eastern and southern states will be asked by the National Association for the Study and Prevention of Tuberculosis to stop sending consumptives in the last stages of tuberculosis and without sufficient funds to the southwestern part of the United States in search of health, according to an announcement made today by that association.

While it is impossible to tell accurately how many consumptives there are at present living in the states of Colorado, New Mexico, Arizona, Southern California and Western Texas, it is probable that no less than 10 per cent of the 6,000,000 people in this territory have tuberculosis themselves, or have come to the West because some member of their family has had it. Every year the health authorities estimate, not less than 10,000 consumptives hopelessly diseased come West to die. For these cases, the climate of this section of the country can do nothing and they are compelled to die in strange surroundings and thousands of miles from home and friends.

The National Association points out further that from 50 to 60 per cent of these advanced cases are too poor to provide the proper necessaries of life and they are either starved to death or compelled to accept the meagre charity which this part of the country affords.

In an effort to stop the migration of consumptives of this class to the Southwest, the National Association will ask physicians to be more careful in ordering patients to go away, and will also ask railroads to discontinue their practice of selling "charity" tickets to those who cannot afford to pay full fare. "No consumptive should go to Colorado, California, or the West for his health," says the association, "unless he has a good chance for recovery from his disease, and unless especially he has at least $1,000 to spend for this purpose, over and above what his family may need.

"Tuberculosis can be cured in any part of the United States, and it is not necessary for a tuberculosis patient to go West. Whenever possible, the National Association urges tuberculosis patients who have not ample funds to go to a sanatorium rear home, and if they cannot do this, to take the cure in their own homes, under the direction of a physician."

OCCUPATIONAL NEUROSES.

Abstract of a paper read by Dr. Tom A. Williams, of Washington, D. C., in section 4 of the Fifteenth International Congress on Hygiene and Demography.

"Neurosis is a misnomer; for those of occupation are strictly psycho-dynamic inhibitions of disorders in the habitual series of co-ordinated associations gained by education in some art. A want of harmony in the controlling of the mechanism is the fault, hence the disharmony is always psychological was asserted in the introduction to a series of studies of cases of occupational "neurosis" delineated in detail.

Many cases of various forms of occupational or professional neurosis, including traumatic neurosis of railway and industrial accidents, were described. In these was shown the necessity of addressing the treatment to the *psyche* or the mind of the patient. "It is not an incapacity of muscle and nerves to perform their function for this is intact except for performing the particular professional acts which fail." Four of the cases described were those of writers' cramp, the commonest occupation neurosis.

One of the cases described was that of a navy paymaster, who suffered with writers' cramp or palsy to the extent that he was unable, as the day progressed, to write his signature legibly by the time afternoon had arrived. At the patient's first interview with the physician the former was brought to appreciate the psychogenesis, or mental origin, of the trouble. The patient with this fact clearly in mind and through his own efforts, as directed by the physician, entirely re-

covered within a month's time. Another case of writer's cramp was shown to have arisen entirely from impatience on the part of a woman, of routine letter writing. After a somewhat longer period than in the first case her writing was practically normal. Two cases of telegrapher's cramp were also described.

The chief difficulty in treatment is to persuade the patient that his disorder is not physical, as he has been told so, so often. When this is done, graduated exercises accomplish the cure.

DIAGNOSIS OF INDIGESTION.

Jewett V. Reed, M. D., of Indianapolis, in a paper on this subject before the Indianapolis State Medical Association and published in the association journal, Oct. 15, concludes as follows: "I wish to emphasize the fact that chronic indigestion is the result of a serious underlying condition. That this underlying condition should in all cases be determined, for be it subject to either medical or surgical therapeutics, justice can not be done the patient without first determining the underlying abnormality. If the cause cannot be definitely ascertained as being one amenable to medical treatment, the best interests of the patient lie in a timely exploratory incision."—G. D. L.

SURGERY OF THE FEMALE URETHRA.

FRED J. TAUSSIG, *M. D., in Journal. Missouri State Medical Association, Nov.* 1912. Taussig thus summarizes: "The essentials of success in plastic surgery for relief of incontinence are: (1) the temporary formation of a vesico-vaginal fistula; (2), firm support by the levator ani muscles through additional stutures; (3) reinforcement of the sphincter urethrae muscle by bringing together the surrounding tissues of the triangular ligament; (4), the formation of a new urethra, when necessary, by flaps from the surrounding raginal and vestibular tissue."—G. D. L.

PUERPERAL ECLAMPSIA.

One of the most interesting papers which has come to the profession in recent years on this much neglected subject of eclampsia, has come from the pen of Dr. A. J. Skeel, of Cleveand. Ohio. This paper appeared in the *Cleveland Medical Journal* for May, 1912, and should be read and studied by every practitioner of medicine who has to do with the lying-in chamber. Dr. Skeel's summary is as follows:

"1. Albuminuria is the most uniformly present symptom of preeclamptic toxemia.

2. Its persistence, in spite of treatment, is more significant than its quantity.

3. Albuminuria, rise in blood-pressure, and edema are unfortunately "grouped" in their severity.

4. The child's interest in induced labor is identical with the mother's.

5. Eliminate vigorously before starting labor.

6. Whenever under reasonably vigorous treatment the patient does not improve, induce labor.

7. In the presence of actual convulsions: (a) If the cervix is open apply forceps or do version; (b) if the cervix is closed do vaginal or abdominal Cesarean section; (c) avoid the strain of labor.

8. Gas is the anesthetic of choice for operative procedure, next ether; never chloroform.

9. Avoid undue forcing of hot packs for fear of heat stroke.

10. Secure time for production of elimination by controlling convulsions with morphine.

11. Ordinarily the high blood-pressure needs no specific attention.

12. The successful treatment of eclampsia requires much personal attention by the physician."

Dr. Skeel purposely avoids the time-worn discussions with regard to veratrum viridi, chloral hydrate, etc., and has had no experience with thyroid extract, and Fischer's treatment.—F. LeM. H.

Miscellany

A HEATHEN SECT.

A little child of 5 years old died of diphtheria the other day, after one "present" treatment and several "absent" treatments by a "Christian" Science mummer. The deluded mother stated that the child had been "in error." By error she explained she meant a "slight sin." In other words, this strange sect teaches that the Judge of all the earth will slay a 5-year-old child for a slight sin. Has heathendom ever evolved a more savage doctrine? It is akin to the horrible belief once taught that hell is paved with the skulls of unbaptized infants.

And these rivals of the Witch of Endor flourish exceedingly, fatten on the blood of their innocent victims and go unwhipped of the law because they call such a doctrine religion, and justice keeps her sword in her sheath and smiles benignantly, if not inanely, on the lawless practices of this sect, because of the cloak of religion with which its votaries sanctimoniously cover their nakedness.—*N. Y. State Jour. of Medicine.*

A NATIONAL HEALTH DEPARTMENT.

"The Health Department would say to the citizen, "If it is your pleasure to die of consumption you may do so. If you wish to die of smallpox you may do so; that is your business. But you shall not spread consumption among others if we can prevent it, and you shall not spread the smallpox. A department of health would give good advice, it would prevent the spreading of disease, and no sane person could object. * * * * A national bureau of health would be chiefly advisory, answering questions, spreading information, preventing the spread of contagious diseases. And once established, not even the most cracked-brained dreamer or the most selfish exploiter of disease would readily advocate discontinuing it."—*Chicago American*, July 23, 1912. G. D. L.

PROSTITUTION AND MARRIED MEN.

Dr. Maude Glasgow declares that prostitution is supported largely by married men who have wives and families at home. Dr. Talmage at one time made a thorough investigation and found

they had among their patrons, "the aristocracy of finance, commerce and industry," that there could be found judges, lawyers, legislators, church officers, men who might be engaged in making laws to regulate social evils, marriage and divorce."

G. D. L.

SUICIDES IN FRANCE.

The number of suicides, which in 1901 was 8,818 (6,809 men and 2,009 women), has been increasing, especially since 1905, until in 1910 it was 9,819. This number is evidently less than the total number of suicides, for without doubt many suicides are never noted by the authorities. The suicide rate is 25 per hundred thousand. This is three times what it was seventy years ago (9 per hundred thousand in 1840, 17 in 1880, 22 in 1900). The mean number was exceeded in 1910 in twenty-six departments. The 9,819 suicides in 1910 comprised 7,476 men and 2,343 women, or 34 per hundred thousand males and 12 per hundred thousand females. Frequency of suicide increases with the advance of age and the maximum is reached among the old; but the rate is increasing among children less than 16: the annual mean from 1901 to 1905 was 60 and from 1906 to 1910 was 80. Widowers do not take a prominent place in the total number of suicides but advance to first position if considered according to the census enumeration. Their suicide rate is 163 per hundred thousand, about three times that of the bachelors. Widows and divorced women show a tendency to suicide, but to a less degree than widowers and divorced men. Among 9,282 suicides whose home was known, 4,968, or 54 per cent., lived in the country and 4,314, or 46 per cent., in the city. The rate in the country was 21 per hundred thousand and in the city 26. Servants of both sexes committed suicide oftener than persons employed in other ways, and members of the professions come next. Spring and summer are the favorite seasons for committing suicide, says the Paris correspondent of *The Journal of the American Medical Association.* Physical suffering accounted for 21 per cent. of the suicides, mental disease for 15 per cent., unhappiness and ill fortune for 12 per cent., drunkenness for 12 per cent., domestic misfortunes for 9 per cent., disappointment in love for 4 per cent., misconduct for 2 per cent., and other motives for 24 per cent.—*Jour. Am. Med. Assoc.*

Perhaps one of the very best definitions of the quack came from the pen of that British poet and novelist who sleeps in the Temple churchyard, a few paces off from the noisy Strand in old London. It was the saying of Oliver Goldsmith, and verily it is as true to-day as it was back in 1760:

"The quack recognizes no difficulties like the professors of other sciences. He delights in the most desperate cases. He is gifted with the power of curing all ills. When I think of the quack these words always come to my mind, "of all thieves fools are the worst. They rob you of time and temper."

F. L. H.

HATE.

By JAMES STEPHENS.

My enemy came nigh,
And I
Stared fiercely in his face.
My lips went writhing back in a grimace,
And stern I watched him with a narrow eye.
Then, as I turned away, my enemy,
That bitter heart and savage, said to me:
"Some day, when this is past,
When all the arrows that we have are cast,
We may ask one another why we hate,
And fail to find a story to relate.
It may seem to us then a mystery
That we could hate each other."
Thus said he.
And did not turn away,
Waiting to hear what I might have to say,
But I fled quickly, fearing if I stayed
I might have kissed him as I would a maid.

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Original Articles

MANAGEMENT OF CARDIORENAL CASES EXHIBITING HIGH BLOOD PRESSURE.

Lawrence Litchfield, M. D.
Pittsburgh, Pa.

(Delivered before the Ohio County Medical Society, at Wheeling, West Virginia, December 2, 1912.)

In regard to cardiorenal diseases, as well as in regard to other diseases, we are beginning to realize that as practitioners we are more concerned with functions and efficiency than we are with pathological anatomy. What we observe is not that the patient's kidneys are contracting or swelling, nor the sclerosis of the renal blood vessels, nor the growth of connective tissue in the renal parenchyma, but an increasing nervousness or irritability, unwonted fatigue or dyspnoea on slight exertion, possibly the Cheyne-Stokes type of respiration, at first only during sleep, headache, difficulty in or disturbances of vision, vertigo, edema, nausea, vomiting, diarrhea, cramps in the legs, twitching of the tendons, frequent micturition, getting up at night and passing more urine by night than by day or a smaller amount when on the feet than when recumbent, transient aphasia, or other transient paralysis, an abnormally high blood pressure, and possibly convulsions and coma.

Consequently we should strive to classify our cases according to signs and symptoms which are tangible and which may form a basis of treatment. This is practically the method of classification of the younger French school.[1]

Every case should be individualized. While dieting them, we should take care that we do not starve them, nor should they be debilitated by determined effort to hammer down the blood pressure without cause. Whether the patient can take complete rest or is absolutely obliged to go on with his work makes the greatest difference in the world in the diet which should be ordered for him. In all cases the mouth and teeth should receive particular attention.

About twenty-five or thirty years ago, several new coal-tar preparations were discovered and named "antipyrin" and "antifebrin," etc., because of their effect in reducing temperature; and fever was taken as an indication for the administration of these drugs. Fortunately this fallacy was short-lived.

Six or eight years ago, the sphygmomanometer began to come into general use and the discovery of a high systolic pressure was considered an indication for the exhibition of vasodilators. Now we have come to realize that in a large majority of the cases, if not all of them, the high pressure is compensatory and if it is to be attacked it is to be attacked only by removing the necessitating cause.

Cases of hypertension may be divided into three classes: First, the hyperpiesis of Albutt[2], or cases neither nephritic nor arteriosclerotic, and at present not understood, they may be presclerotic; second, cases in which the hypertension apparently precedes and causes the arteriosclerosis[2a] and subsequently renal disease, with the final cardiac complications; and third, cases

in which the hypertension seems to follow as a result of chronic nephritis. Cabot[3] says that ten per cent of the cases of hypertension are not nephritic.

As to the direct causes of hypertension there are several theories. Any or all may be active in certain cases, but this question is not yet settled. First, the mechanical theory—that the high tension is caused by the necessity of overcoming the increased peripheral resistance caused by narrowing of the small vessels either by spasm, by increased action of the suprarenal glands, or by arteriosclerosis; also by some disturbances of the drainage from the capillary beds not yet understood, just as the water dams back into the feed canals of an irrigation system when conditions of the soil prevent the free percolation of water through it (in all cases of high tension the radial arteries can be palpated between the systoles because they are full, but if there is any considerable degree of arteriosclerosis the arteries are stretched, i. e., elongated, and therefore must be tortuous, and, furthermore, they can be palpated after having been emptied between two fingers). Second, toxic: (a) by nephrolysins and nephrotoxins resulting from the disintegration or degeneration of kidney tissue, and (b) from the retention in the system of waste products that would have been eliminated by healthy kidneys.[4]

That the mechanical factor is often predominant is shown by a recent case of my own and by numerous cases reported from Johns Hopkins, in which the administration of chloroform caused a drop of 100 m.m. in systolic pressure (for this reason it is probable that when hypertensive cases must be anesthetized chloroform is the safest anesthetic).

A recent interesting article by Hoskins and McClure[5] seems to demonstrate that the secretion of the suprarenal glands is not the direct controlling factor in the maintenance of vasomotor tone.

Now, as to vasomotor tone, we must bear in mind the excellent work of Romberg, Paessler, Crile and others, which has demonstrated that it is failure of vasomotor tone, and not cardiac failure, that is the determining factor in many cases of sudden death previously attributed to the heart.[6]

Treatment.—As to the treatment of hypertensive cases, it is always in order to diminish the load which the heart has to carry, just as much as the necessities of the individual case will permit. In hyperacute cases of nephritis with high blood pressure, anuria and tender kidneys, we should consider surgical interference in the form of decapsulation of the kidneys according to the method of Edebohls. In other acute cases, such as cases of uremia, with or without convulsions, bleeding should be promptly resorted to, and from one to two pints of blood may be drawn in urgent cases.

An interesting proof of the fact that in these cases the heart is failing from the excessive burden which is imposed upon it is shown by the fact that oftentimes the systolic pressure will actually rise after phlebotomy, while the pulse falls and the patient feels much relieved, the explanation being that the weakened heart is only able to carry a smaller load to the necessary height. I might mention here that, while a rise of pressure with a fall of pulse rate may be a good omen, the reverse, that is a fall of pressure with a rise of pulse rate, is always a bad prognostic sign.

In less urgent cases the blood-letting may be in the form of small bleedings, say three or four ounces, daily for a week or ten days. Under this method of treatment more liquids may be allowed the patient and benefit may result from lessening the viscosity of the blood and a gradual flushing out of the system. Let me emphasize here the importance of the return of Cheyne-Stokes respiration as an indication for the prophylactic repetition of phlebotomy; also hypertensive crises associated with severe headache as indicating the same aggressive treatment.[7]

Other important factors in conserving the heart's energy are (1) rest in bed (and the patient should be made to realize that "staying in bed" is one thing and "resting and relaxing in bed" may be very different); (2) the free use of hydragog cathartics, of which my favorite is magnesium sulphate in concentrated solution; (3) free sweating, best in a horizontal cabinet which may be placed over the patient as he lies in bed, care being taken that the patient's head is elevated and protected from congestion with cold cloths or icebags; (4) limitation of the liquid intake and the avoidance of drinking water which contains a high per-

centage of calcium; (5) the tentative employment of vasodilators; (6) the banishing of sodium chloride from the diet, because the damaged kidneys cannot well eliminate the superfluous chlorides, and chloride retention necessitates water retention (this principle seems to have been well established by numerous German observers, as Von Norden, Kraus, Mueller, Strauss, Minkowsky, Magnus-Levy and many others[8]), and even with healthy kidneys it is probable that the necessary elimination of an excessive amount of sodium chloride may cause the retention of waste products that otherwise would be eliminated; (7) the administration of the iodides. In cases in which iodide of sodium or potassium are not well borne I have used, with apparent benefit, iodide of strontium, iodipin, or sajodin. The long-continued use of these drugs seems to do good, possibly by influencing the nutrition of the vessel walls, possibly by modifying the viscosity of the blood; (8) if lightening the load of the heart does not seem to be sufficient, we may have to stimulate the heart. For this purpose I rely chiefly upon digitalis, camphor and caffeine. I give strychnine also. Digitalis is certainly not contra-indicated by high blood pressure in the presence of any evidence of cardiac decompensation, such as cardiac edema and scanty urine. It is perhaps best to withhold the digitalis until the salines have begun to act freely, after which the digitalis is more apt to have a diuretic, as well as a tonic, effect.

If the tension is very high we may combine the vasodilators with the digitalis. If, under these circumstances, the vasodilators seem to relieve the headache and make the patient more comfortable, we may be sure that their use is justifiable, but they should be used sparingly and not in sufficient amounts to reduce the systolic pressure but only to make the patient more comfortable by equalizing the circulation. In these cases it must be remembered we are seeking to enable the weakened heart to respond to the demands made upon it, consequently it may be necessary for the systolic pressure to go up and not down.

After the threatening symptoms have been relieved and the threatening signs dispelled, we turn our attention to the continuous management of the individual case, and here, perhaps more than previously, the cause of the hypertension becomes important.

Non-nephritic Cases.—Let us consider first the non-nephritic cases. If there is any evidence of lues, specific treatment should be instituted. A Wassermann should be done in all doubtful cases. Outside of syphilis, it should be borne in mind that the potent cause of hypertension is excess: first, excessive work and worry; second, excessive eating, and here should be mentioned the use of alcohol, which, aside from its effect on the liver and kidneys, probably has its worst effect in these cases by causing the excessive intake of unnecessary food; here should be mentioned also the excessive use of extractives and purin bodies—the Roman philosopher said "Men do not die, they kill themselves," and in the old fighting days of English history an English philosopher said, "The platter kills more than the sword"; third, excessive use of tobacco. All of these vices should be curbed.

In suitable cases great benefit results from the reduction of superfluous weight, also from increasing the hours of rest both by day and by night, and from insisting on frequent warm baths and a rational regulation of exercise, ordering a sufficient amount but without strain or fatigue. The bowels should be carefully watched, never being allowed to get into a condition that will require any straining. Massage, to promote the lymphatic and venous circulation, and a mild equable climate when possible, are advisable. After a long trial, the author has given up the use of high frequency electricity in these cases because of a lack of results.

The long-continued use of the iodides has been mentioned. It is probable that Chittenden's standard of fifty grammes of protein daily is sufficient in these cases, and it is best to take them at the midday, rather than the evening, meal, because of the lowered oxidation during the night.

Nephritic Cases.—In nephritic cases, after all emergencies are past, we study the urine carefully and pay particular attention to all the emunctories. Nearly all the suggestions for the non-nephritic cases hold good here. Albuminuria does not necessarily mean that the case is a nephritic one. The impermeability of the kidney cells to

albumen is probably overcome by any pressure above 200 m.m. Hg. Rather must the diagnosis rest on the previous history and general condition of the patient.

Care must now be taken in the use of the salines, not to use them too long or in too large amounts lest they may interfere with intestinal osmosis and the absorption of nutrition from the digestive tract, impair the tone of the intestinal muscles, or promote autointoxication. If preparations of iodine or diuretics of the theobromine group are used the kidneys must be safeguarded by frequent examinations of the urine.

The blood should be watched and anemia treated with fresh air, iron, arsenic, etc. The phenolsulphonephthalein test should be applied as a gauge of the renal efficiency and the diet regulated accordingly, particularly as to protein, purins, and extractives. Great care should be taken in these cases to see that they are not underfed. If the protein ration is cut down to fifty gms. daily, as is sometimes desirable, the caloric indications must be made good with fats and carbohydrates. It is well to have made for several days a rough estimate of the caloric values of the food which is actually taken, as this is the only way we can be sure that the patient is getting enough. The amount of water given for the purpose of flushing the kidneys should depend on the cardiac efficiency.

A warm equable climate during the winter months is most desirable in these cases, and, if they are gouty, a residence at a reliable radium cure is strongly to be recommended, and the use of atophan has been the occasion of many favorable reports in German literature.

Termination.—The termination of these hypertensive cases may be by any one of three routes: uremic, cerebral, or cardiac. It is well to keep the idea before our minds that hypertension eventually acts on the heart just as an aortic stenosis does, but before it has had time to act in this way, leading to the usual broken compensation and final asystole, the patient may go off suddenly from a first attack or suffer for years repeated attacks of angina pectoris, or may succumb to an acute pulmonary edema, which is probably an effect of combined renal and cardiac decompensation.

As to the method of measuring the blood pressure, the only instrument which thus far has stood the test of continued use has been the regular mercurial instrument, one of the many modifications of the Riva-Rocci.

Allow me to cite very briefly a few illustrative cases:

Hyperpiesis: Miss F. I. J.., aged 46, leutic history, beginning climacteric. Lives luxuriously, eats to excess, lacks energy to take sufficient exercise, therefore naturally toxic, nervous and apprehensive. Has hypertensive periods when systolic pressure rises above 200, with increased nervousness, headache, etc. The peripheral arteries are not palpable, second aortic sound not accented, heart impulse does not show hypertrophy, the examination of the urine is negative.

Arteriosclerotic Type: S. A. M., aged 61. First seen six years ago. Father died at 61 and mother at 57; both cerebral deaths. This patient's S. P. was running from 220 to 240. The empty radial artery was palpable, and, although he had no signs of cardiac or renal decompensation, I advised him to give up his work for a time at least. He has since devoted his entire time to analyzing his own symptoms and the result is a neurotic hypochondriac, with an unlimited collection of gastric, optic and neurological symptoms—a burden to himself and a great trial to all who come in contact with him. His urine showed a few casts, but no albumen, and was of normal specific gravity.

Mrs. A. B. First seen in 1907. High pressure; accented aortic second. Had had a great deal of worry. Urine showed rather low specific gravity, a trace of albumen and a few hyalin and finely granular casts. For five years this patient has had very severe hypertensive crises, which have been relieved by rest, starvation, and vasodilators. Has had two attacks of transient hemiplegia. While taking 1-20th grain of nitroglycerin every two hours, same was accidentally discontinued without showing any appreciable change in the blood pressure, which had been materially reduced during the first few days after the nitroglycerin was ordered. During the five years that this patient has been under observation, there has been no appreciable advance in the kidney condition.

Nephritic Type: W. F., aged 46. Brother died at 45 of cardiorenal disease. Both used considerable alcohol. From 1904, patient subject to attacks of three-day headaches. In 1906 laid up for three weeks with supposed grippe and tracheitis. In 1907, albumen, casts and hypertension discovered by insurance examiner. In 1908, painful renal attack with leucocytosis. Realizes that he feels better and that his memory is better when his blood pressure is high. Looks pasty and anemic. In 1911, threatened cardiorenal decompensation. S. P. 250. Headache, cardiac asthma, acute pulmonary edema. Symptoms dispelled by very vigorous treatment. In the spring of 1912, after having Cheyne-Stokes respiration off and on, particularly at night, for some time, also headaches, developed sudden attack of aphasia, lasting a few minutes and fol-

lowed by thick speech and partial paralysis of right face. S. P. 220. Condition, semi-conscious. Bled 22 ounces. Immediately after bleeding S. P. 235. Marked improvement of the condition and gradual return to health and business. The Cheyne-Stokes character of breathing disappeared after the phlebotomy. The phenolsulphonephthalein test at this time showed 35.5% in two hours. The urine was that of a contracted kindey. In August, there was a slight attack of hemiplegia, the speech, face, arm, and leg being affected and and gradually progressive narrowing of the field of mental activities became more noticeable. In November, 1912, because of the return of Cheyne-Stokes respiration, a prophylactic phlebotomy was advised. This was postponed by the patient, and on the 18th day of November he suddenly became blind, with some motor paralysis, followed immediately by several epileptoid seizures of a strikingly Jacksonian type. S. P. 275. Eighteen ounces of blood was drawn at once, when the convulsions immediately became milder and soon ceased. Morphine and codeine were used freely to keep the patient quiet for the first few days, after which he steadily improved under the usual treatment. Spinal puncture immediately after the convulsions yielded only a few drops of perfectly clear fluid.

C. S., aged 41, weight 250 pounds. Seen in July 1910. Father and mother died at 44 and 48 respectively, one of rheumatism and the other of carcinoma. Patient had typhoid ten years ago and has used whiskey freely ever since. For the past year has noticed dyspnoea on exertion and for the past six months anginoid attacks. For six weeks anorexia, blurred vision, weakness and vomiting. S. P. 230. Urine very low specific gravity, with trace of albumen, hyalin and finely granular casts of large diameter. Patient refused to go to bed and take proper treatment. Returned in September in bad condition. S. P. 244. Urine shows a large amount of albumen and dark granular casts. Reduction of blood pressure with vasodilators makes the patient more uncomfortable. Free phlebotomy gives only temporary relief. Died in uremic convulsions early in December.

E. R., female, aged 55, weight 141 pounds; school teacher. First seen May, 1911. Sister died cardiorenal death at 56. Patient has had the common nervous breakdown attendant upon her occupation. Last vacation did not rest her. Cannot set a date for the beginning of her trouble which has been insidiously progressing. Weakness, dyspnoea on exertion, headache, disturbance of vision, cramps in legs, malaise, and depression on awakening, etc., etc. Ophthalmologist reports typical albuminuric retinitis. Her last doctor put her in a hospital and reduced her blood pressure from 245 to 185. Patient says it took her over six weeks to recover from this. Under treatment outlined above she has been able to go on with her work and to steadily improve in health and strength. Has taken with benefit small doses of nitroglycerin from time to time. In February 1912. she weighed 158 pounds and was entirely free from edema. The phthalein test showed 35.5% in two hours. The most important feature of her treatment seemed to be increasing caloric value of her diet while properly modifying its character, insisting that she spend all her leisure time in bed, and the daily use of prolonged hot tub baths. She has taken dram doses of saline daily for nearly two years without any evidence of harm therefrom.

Early Nephritic Type With Angina: Mrs. I. D., aged 38, weight 199 pounds. First seen November 9, 1912. Father died at 56 of cardiorenal trouble. Family inclined to be stout. Otherwise negative. Never any serious illness. Some uremic symptoms during and since last pregnancy, four years ago. Present condition: Has not been able to lie down for a week. Urine scant. Occasional vomiting. Two weeks ago severe pain in epigastrium and precordia and down the left arm. Severe headache much of the time preceded by spinning flashes before her eyes. Pulse 110—regular. S. P. 280—D. P. 160, by Pachon instrument, which is about 15 or 20 per cent higher than Riva-Rocci. Heart moderately enlarged—sounds valvular. Sent to hospital with orders to limit liquid intake to less than three pints daily, and give half ounce of epsom salts every two hours. Hot air cabinet bath in horizontal cabinet placed over the patient in bed, with head and shoulders raised on back-rest, once or twice daily. Diet free from purins and sodium chloride. Late the same evening at Pittsburgh Hospital, pulse 116; S. P. 195, D. P. 120. Aortic second sound very loud and ringing. The next day S. P. was 175, D. P. 125, which was the average until she left the hospital. Discharged from hospital November 23rd. Pulse 80. S. P. 170, D. P. 125. Weight 180. Temperature 98.40. Respiration 20. Sleeping in bed, flat, and walking about without dyspnoea.

In closing, allow me to emphasize a few of the observations which these cases have occasioned. Nitroglycerin should be given intermittently. However beneficial its effects, it can be entirely discontinued in a few days without any shock to the organism. There is notable frequency of cardiorenal disease and premature deaths in the family histories of these cases. They offer great possibilities in the way of prolonging life and efficiency. With the exception of the cases which are primarily nephritic, these hypertensives are generally high-strung, hyperactive individuals, demanding occupation and diversion, and they should be strongly advised to shorten sail or check their fires, but to stay in the game, thus avoiding the danger of their becoming self-centered hypochondriacs from the fixing of their attention on their blood pressure and symptoms for want of a better occupation.

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5431 Fifth Avenue.

CHOLELITHIASIS AND PANCREATITIS, THEIR SURGICAL TREATMENT.

By J. K. Oates, M. D.
Martinsburg, W. Va.

(Read at Annual Meeting of State Medical Ass'n, July 11, 1912.)

My object in selecting this subject is due to the proximity of the organs involved and the relationship existing in the etiology of the pathological conditions. I think we should know the connection between these parts and therefore I will give a brief embryological description.

The primitive intestinal tube is composed of the "foregut," the "midgut" and the "hindgut." From the foregut we get the backwall of the pharynx, esophagus, stomach, liver, pancreas and the duodenum to a point below the entrance of the common duct. The derivatives of the foregut are concerned in the preparation of food for absorption. From the midgut we get the terminal portion of the duodenum, jejunum, ilium, cecum, ascending and a portion of the transverse colon, which are concerned in the absorption of the food. From the hindgut the remaining portion of the transverse and descending colon, sigmoid and upper part of the rectum, which serve as storage.

About the third week there projects forward into the anterior mesogastrium a diverticulum of the large gut at the part which is to become the upper duodenum. This diverticulum is composed of hypoblastic tissue which extends up into the mesoblast at the transverse septum of His. From this diverticulum two buds are developed which form the liver, including the hepatic ducts. The gall bladder and cystic duct are formed from the common duct, which is an extension from the duodenal tissue.

During the fourth week of development a diverticulum consisting of two processes, pushes from the duodenum into the mesogastrium and forms the pancreas. These two pancreatic lobes retain their primitive form, having two openings into the duodenum, the duct of Wirsung being chief and the duct of Santorini the lesser.

The pancreas at this stage is completely surrounded by peritoneum, but later it loses its posterior layer thereby fixing the duodenum. When fat necrosis takes place from pancreatic leakage, it spreads into the peritoneal cavity as well as behind it.

Anatomical Description.—The gall bladder in its normal condition is pear-shaped, and measures approximately three to four inches in length and about one and a half inch in width at the fundus, having an average capacity of one and a half ounces It lies obliquely downward, forward and to the right, touching the anterior abdominal wall at the meeting of the outer border of the right rectus muscle and costal arch. This point corresponds frequently with the tip of the ninth rib.

The gall bladder has three coats, mucous, fibromuscular, and peritoneal. The mucous coat is covered with columnar epithelial cells and secretes a quantity of mucus. The fibromuscular coat consists of a dense fibrous tissue which interlaces in all directions, and is mixed with plain muscular fibers which run principally longitudinally but a few run transversely. The peritoneal coat is derived from the peritoneum and surrounds the fundus, but covers the body and neck only on their under surface. In all hollow organs which have storage function, the outlet is elevated above the lowest point to prevent the pressure of the contents falling upon the sphincter muscle. Bile is being poured out all the time as the output is from twenty to thirty ounces in twenty-four hours. Murphy believes that the gall bladder acts like a second bulb of a syringe, to produce a steady flow instead of a jet-like discharge from the common duct into the duodenum. The biliary ducts are the hepatic, cystic and common duct.

The hepatic duct is formed by two trunks of nearly equal size, one issuing from the right and the other from the left lobe of the liver. The hepatic duct is about one and a half inch long, passes downward and to the right where it joins the cystic duct at an acute angle to form the common duct.

The cystic duct is the smallest of the three biliary ducts and is about one and a half

inch long. It passes obliquely downward and to the left from the neck of the gall bladder, where it unites with the hepatic duct to form the common duct. The mucous membrane lining this duct is in a series of crescentic folds from six to twelve in number, similar to those found in the neck of the gall bladder. These folds are obliquely around the duct and are valvular in appearance. The common duct is the largest bile duct of the three and is about three inches long, formed by the union of the hepatic and cystic ducts. It descends along the right border of the lesser omentum behind the first portion of the duodenum, then passes between the pancreas and the descending portion of the duodenum for a short distance along the right side of the pancreatic duct. The common duct and the canal of Wirsung open by a common orifice upon the summit of a papilla or diverticulum of Vater at the inner side and below the middle of the duodenum. The structure of the ducts is composed of two coats, inner or mucous, and outer or fibrous. The blood supply of the gall bladder is from the cystic artery and usually is given off from the hepatic parietes, but occasionally it arises from the superior gastroduodenal artery. Should it arise from the latter it follows the common duct and may be injured in operations upon the common duct. There is usually a transverse vein on the surface of the common duct, and if injured it bleeds freely. The lymphatic glands are few and no lymph nodes are on the gall bladder and but few lymph channels. There are a few scattered glands along the common and cystic ducts, and one especially at the junction of the common and cystic ducts. These glands may enlarge and block the ducts and are thus calculated to cause the surgeon to think they are stones at first thought. I have found them and thought they were stones when I first felt them, but on careful examination decided differently.

There is a poor nerve supply of the visceral peritoneum, as shown by Lennander

Jonas has demonstrated that the eleventh and twelfth dorsal and first lumber nerves pass forward to the diaphragm, and their filaments reach the neck of the gall bladder, common and cystic ducts.

The chief constituents of gall stones are cholesterin and bilirubin calcium. They are produced by subacute inflammatory changes in the mucous membrane of the gall bladder which produces a desquamation of the epithelium and an increased production of mucus.

There are three factors which play their part in the formation of the stones, viz.: first, there is a bacterial origin; secondly, a greater degree of bacterial attenuation; and thirdly, the retention or stasis of the bile flow. The bacterial infection is no doubt carried through the portal circulation, the action of the liver cells being to destroy or attenuate the virulence of the micro-organism.

The stones are of various sizes, shapes and colors. The time of the stone formation varies from a few days to months The infected gall bladder may become slightly obstructed and filled with a gelatinous mass, and in this way particles form a nucleus and stones are formed in the same manner as you would roll up a snowball. The age and sex no doubt have some influence in forming gall-stones. The age is usually about forty to fifty years, and about seventy-five per cent of cases are in women. The cause of this may be due to the fact that women lead a more sedentary life and are more constipated, giving an opportunity for the colon bacilli to penetrate. Pregnancy plays a considerable role, as Naunyn claims that ninety per cent of women with gall-stones have borne children.

Symptoms.—The symptoms depend upon the location in the biliary tract. The variety of pain is apt to be confounded with that of the stomach. The pain may be mild or severe, depending upon the irritation and inflammation of the gall bladder or ducts. The pain usually radiates to the right subscapular region. The most common sign of gall-bladder hypersensitiveness, according to Murphy, is the inability of the patient to take a full inspiration when the physician's fingers are hooked up deep beneath the right costal arch, below the hepatic margin. The history is frequently the most valuable means of a diagnosis. Patients often complain of chronic dyspepsia with a tenderness on deep pressure over the gall bladder. Careful investigation into the history will not only enable you to make a diagnosis of gall stones but will enable you to determine their location.

Stones in the gall bladder with a mild intermittent infection cause sudden colics; these colics are mostly in the epigastric region and radiate to both sides, back and upward. The pain comes suddenly regardless of food, time of day, or exercise. The cessation of pain is as abrupt as its origin. Gas is eructated and a sensation of relief is accompanied by vomiting. The cause of the pain is due to obstruction at the neck of the gall bladder, either by the lodgment of a stone or by swelling produced by an infection. In severe attacks you have an increased pulse rate and temperature.

Stones in the cystic duct as a rule do not produce a complete obstruction. There will be colicky pains as the stones migrate down the duct. The muscular gall bladder has a tendency to force the stones into the common duct. Impacted stones in the cystic duct produce a large cystic condition in the gall bladder. I operated upon one, about four months ago, in which there was a quantity of mucus in the gall bladder with no bile at all, until the stone was removed.

Operations Upon the Gall Bladder and Ducts.—The patient should be removed to the hospital the day before the operation, and prepared for the operation on the day following, unless there are some contraindications. He should be put to bed, given a liquid diet, and one to two ounces of castor oil. He should be shaved, and if the skin is in good condition, paint the field and surrounding parts with a 50% tincture of iodine. The morning of the operation patient should be painted or sprayed again with iodine. I have been following the iodine method for the last two years, using a 50% solution, instead of the old plan of scrubbing and using different solutions. The incision, in my opinion should be made in the right rectus, or the Bevan incision. Cholecystostomy is the operation of choice for cholelithiasis. It is not necessary to speak of instruments, table, etc. Each operator should use the things that enable him to do the best work. After incising the gall bladder and evacuating stones and bile, place a one-fourth to one-half inch rubber tube wrapped in three or four thicknesses of gauze, then with rubber tissue, introduce it into the gall bladder two or three inches deep. Having done so run a purse-string suture around the gall bladder one-fourth to one-half inch below the opening, then invert the gall bladder down to the purse-string suture. Run another suture around, penetrating the gauze, using sterile cat gut. You can then stitch the gall bladder to the peritoneum. Having done this, my method of closing the abdomen is as follows:

Close the peritoneum by a running suture of sterile cat gut. Place two or three tension sutures of silk-worm gut through skin, facia, and muscle about one-half to one inch from incision. Close fascia with sterile cat-gut continuous suture. Close skin with silk-worm gut continuous or interrupted suture. Use an 8-ounce bottle to drain bile, and exchange when necessary for another sterile bottle. When stones are impacted in the pelvis of the gall bladder they should be extracted through the gall bladder if possible, and if not, open the duct and remove. Occasionally it will be necessary to do a cholecystectomy, and particularly when the stone is in the cystic duct and the duct is insufficient to afford drainage.

The gall bladder should also be removed where there is a thickened wall, sometimes of cherry-red color which may later give chance for malignant disease. To do a cholecystectomy you should have a free incision well up into the sternal notch; then place your hand on the gall bladder and lobe of liver, draw it well down and forward, and if there are any adhesions loose them. It is well to use a piece of gauze in doing this, as it assists you very much. The peritoneal cavity should be well protected with large moist pads of gauze to prevent any spreading of infection. Expose the cystic duct well, then place a clamp on the proximal, and one on the distal portion to be divided. The duct is now divided, being careful to clamp the cystic artery, and tie off before peeling out the gall bladder, as it acts nicely as a retractor while tying off cystic vessels and end of duct.

Finish the removal of the gall bladder and stitch up the peritoneal flaps by whip stitching across the ditch. Now in regard to draining the duct, I think it a good procedure to place a small rubber tube in the end of the duct to give drainage, and keep it there by purse-string suture of sterile or chromacized cat-gut, depending on the time you desire drainage. You should also place

a drainage tube well down to drain any leakage that may occur.

Operation Upon the Common Duct.—After the removal of the stone from the gall badder, if there be any, clamp the opening in the gall bladder so as to prevent the escape of contents, explore and open the supraduodenal common duct and remove the stones. After the duct has been thoroughly explored to see that there are none left in the hepatic and distal end of the common duct, place a Binnie fish-tail tube in the duct at right angles and fasten there with cat-gut. In case there is hemorrhage and danger of the duct being closed, it is wise to place a "T" drainage tube instead of the Binnie fish-tail tube. If you find there is much bleeding it is wise to inject a mild adrenalin solution in the "T" drainage tube and it can be repeated if necessary.

Sometimes it is very difficult to extract the stones. A very good way is to hold the stone in the duct between forefinger and thumb and milk it, at the same time dislodge it if possible with a small curet. Don't open duct in more than one place if it can be avoided. Place a drainage tube down in the right renal well hole and be sure it is to the bottom to give free drainage. If the gall bladder has been opened put in a drainage tube as in cholecystostomy or do a cholecystostoduodenostomy Now should the common duct be entirely destroyed you can reconstruct the duct in the manner Dr. Arthur G. Sullivan has been doing it on dogs very successfully. His method is to take a rubber tube one-fourth inch in diameter, or larger, and pass one end into the hepatic end of duct one-fourth inch, and suture it in with linen or silk, then pass the other end into the distal end of the duct, should there be any, and if not, ditch it into the duodenum at a distance of one inch or more and not at right angles. Be sure to cover the tube with peritoneum of duodenum by stitching it over with non-absorbable ligatures. The tube is intact at both ends, so you finish the sinus by thoroughly surrounding the tube with omentum well sutured with linen or silk.

There has been but one case reported, so far as I know, of reconstructing the duct and that patient died; but Dr. Sullivan thought it was due probably to faulty technique, owing to the way the tube was placed in the duodenum by Dr. George E. Brewer of New York. He put the tube in the duodenum at right angles instead of ditching it into the duodenum.

ANATOMY OF THE PANCREAS.

The pancreas lies across the posterior abdominal wall behind the peritoneum at the level of the first and second vertebrae. Its larger end, or head, rests in the hollow of the duodenal loop. The head of the pancreas extends from the loop of the duodenum to the left, where the tail comes into relation with the hilum of the spleen. The body of the pancreas lies behind the stomach and behind the peritoneum of the lesser sac. The splenic artery runs a tortuous course along the upper border, and just behind, and a little lower is the splenic vein. The main duct of the pancreas, or duct of Wirsung, runs from left to right terminating in the duodenum in close association with the common bile duct and occasionally it opens into the common bile duct. The duct of Santorini is usually quite subsidiary to the duct of Wirsung, and it may open separately into the duodenum or it may drain a portion of the head into the duct of Wirsung, and again it may open by one extremity into the main pancreatic duct and into the duodenum by the other forming the chief means of outlet for the pancreatic juice.

Functions of the Pancreas.—The pancreas has an internal and external secretion. The internal secretion is the product of the islands of Langerhans and controls the assimilation of sugars. I think it is practically settled that the islands of Langerhans have no connection with the secreting cells, or with the ducts of the pancreas, and any pathological change in the islands of Langerhans produces, therefore, no alteration in the external secretions. Diseases of the pancreas affect the islands of Langerhans only, thereby interfering with the internal secretions; or the parenchyma of the gland, thereby interfering with the external secretions, and in an advanced stage the whole gland may be involved and both secretions may be lessened or abolished.

Diagnosis of Pancreatitis.—There are certain symptoms present in pancreatitis which are suggestive of the disease of this gland, namely, first, hemorrhage; second, fat necrosis; third, altered character of

stools; fourth, alteration in the constituents of the urine.

(1) *Hemorrhage* occurs in acute hemorrhagic pancreatitis, and may obliterate all symptoms other than that of a phlegmonous, sodden gland filled with blood and very often a very large quantity.

(2) *Fat necrosis.* Langerhans has shown that the changes which occur in the fat cells are due to the splitting up of the fatty molecules into its fatty acid and glycerine. The escape of the pancreatic juice from the gland into the surrounding fat is competent, through the agency of its fat-splitting ferment, to cause fat necrosis.

(3) *Altered character of the stools.* The most noticeable character of the stools is the quantity passed, and the soft light color of stools. The normal coloration of the feces is not due to the bile pigments, which are all absorbable, but to a pigment which is insoluble and which results from the action of the pancreatic juice upon some of the coloring matters of the bile. The absence of either bile or pancreatic juice results in the passage of unpigmented feces. If jaundice is absent and all the bile is passing into the intestines, an excess of fat in the stools is suggestive of pancreatic disease. If azotorrhea and steatorrhea are both present, it is a very strong symptom of pancreatitis.

(4) *Alteration in the constituents of the urine.* We are indebted to Opie for the final demonstration of the relationship between glycosuria and lesions of the pancreas. It is known that the internal secretion of the pancreas has a controlling influence upon the carbohydrates metabolism, that this secretion is produced by the islands of Langerhans, and that in pancreatic diabetes it is these islands of Langerhans that give evidence of degeneration. The previous symptoms mentioned, combined with Cammidge's reaction, is a positive proof of pancreatitis. Pancreatitis may be divided into two stages, acute and chronic. Acute pancreatitis is caused more often by an infection, and this infection originates from the common bile duct, due to a stone obstructing the duct and producing a stasis causing bacteria to enter the pancreatic ducts. The next most common site of infection originates from the duodenum, due to an inflammatory condition extending to the pancreas, in typhoid fever, mumps, influenza, etc. The invasion sometimes occurs through the vascular system, due to syphilis, alcoholism, etc.

Symptoms.—The patient is seized very suddenly with severe pain in the upper abdomen, and there may be fainting or collapse followed by vomiting. Pulse rapid, of poor quality, respiration shallow and hurried, looks drawn and very ill. The abdomen as a rule is not rigid nor tender except on deep pressure in the epigastrium. At first there is no distention, but within from twelve to thirty-six hours there is usually a distinct fullness in the epigastrium and later a general intestinal distention may develop. In a few cases vomiting is persistent, consisting first of stomach contents, then bile, and finally of altered blood. There is frequently a leaden color of the face and lips, temperature usually rises but varies, and jaundice is noticed in a great many cases, but may be mild.

Chronic Pancreatitis.—Chronic pancreatitis is now far more common than it was formerly supposed to be. There are two forms of chronic pancreatitis recognized, according to Opie, as interlobular and interacinar. The infection penetrates the gland through the ducts, arteries and lymphatics. In the interlobular there is an inflammatory condition which produces a fibrous deposit and attacks the strands which lie between the lobules. In the interacinar form the fibrous tissue replaces the parenchyma of the gland and separates the individual acini.

Symptoms.—The symptoms in chronic pancreatitis vary very much, depending upon the cause. Pancreatitis may lead to gangrene, necrosis or suppuration, depending upon the amount and kind of infection.

Acute pancreatitis should be recognized and surgical treatment instituted at once. Make an incision above the umbilicus in rectus muscle and as soon as the fat is exposed you may find areas of necrosis, and when you open the peritoneum blood-stained fluid generally escapes. The pancreas is very frequently swollen, dark in color and engorged with blood. It should be incised or punctured in several places, fluid well mopped out, and free drainage established. Examine gall bladder and ducts, and if stones are present remove them and give free drainage. In a great many cases it is an infection of the com-

mon bile duct due to an impaction of a stone in the duct. There is a loss of flesh, pain in the epigastrium, azotorrhea, steatorrhea, and bulky, pale, pultaceous stools are noticed. The coexistence of steady jaundice with an enlarged gall bladder indicates malignancy. The only way to make the distinction is by the Cammidge reaction in the urine, and it is in these cases that Cammidge's test is so useful.

Treatment.—Chronic pancreatitis is more often treated successfully than is acute pancreatitis. The prognosis is very much better in chronic than in acute pancreatitis. When there is an abscess formed, the proper method is to evacuate and drain. It is the infection of the bile in the common duct which causes the pancreatitis, and the drainage of the bile until it has become aseptic is sufficient in the worst cases, to cure pancreatitis. It is very important to drain these cases a long time and in certain cases it is better to do a cholecystenterostomy. In very long standing cases the treatment can only be palliative, as the fibrous deposit is so extensive that an atrophy of the cells and the islands of Langerhans produces death by inanition or diabetes.

In conclusion, it is just as important to operate upon a case of cholelithiasis and incipient pancreatitis early as it is to operate upon strangulated herenia and acute appendicitis early. You cannot use langnage too strong in urging an early diagnosis and a prompt operation in these cases.

IMPORTANCE OF THE EARLY RECOGNITION OF CANCER, OR CANCEROUS LESIONS.

By William Neill, Jr., M. D.
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(Read before the Eastern Panhandle Medica Society, Rippon, W. Va., July 3, 1912.)

Introduction.—Among the great problems which confront the medical profession to-day, the one which stands above all is that of cancer. The question of tuberculosis has been answered, and the education of the public towards preventing and treating it has made great advance. So also as to acute appendicitis and strangulated hernia. Every one knows that either of these conditions must have prompt attention, and therefore seeks medical aid at once. So is it not time now that we should more gradually diffuse what knowledge we have of cancer to the general public? The disease is not confined to any certain class or race of people, but like tuberculosis, occurs among all classes of society and races of mankind.

It is undoubtedly true that the general public at present is looking more anxiously for a specific or cure for this disease, but it is in the line of prevention that the medical profession has assumed its present position of importance in the world today. To prevent a disease is far more creditable to the physician than to cure it; so therefore the profession should be on the outlook to prevent disease rather than to let the patient be subjected to a trying, may be fatal illness, and to this fact the profession and laity at large should be more educated as to the fact of early recognition.

Statistics seem to show clearly that cancer is on the increase, and the sooner this subject becomes one of general discussion, as is tuberculosis, the sooner may the adult hope to reach old age.

Medical Aspects.—The attitude of the medical profession towards the early signs of cancer is to a great extent indifferent, and these are to a greater extent unknown The treatment of malignant diseases as well as other surgical conditions, depends today more upon an early diagnosis which allows earlier operation than to improvement in technique. We must consider irritation of groups of epithelial cells as the primary origin of cancer. There is then a cell proliferation which becomes cutaneous and only when there is infiltration of the tissues. From all the information which has been presented on the subject, it is evident that at some time there often exists a precancerous condition, and such a condition we should recognize, and remove while it is in this stage before it has become malignant. At the onset of both carcinoma and sarcoma both are essentially local diseases. If the neoplasms are removed in this stage cures are accomplished.

Etiology.—The etiology of malignant tumors is not definitely established. At the present time the only accepted treatment of neoplasms is their removal by an operative procedure. Until their etiology has been determined and a new method of treatment

based on this etiology elaborated, surgeons must continue to investigate the subject on the principles of early recognition and complete excision of these new growths. The problems involved are: 1. The early recognition. 2. The method of operation.

Problems of Diagnosis.—In the problems of diagnosis, every lesion simulating a tumor should be considered malignant until every means has been exhausted to demonstrate that it is innocent. Schoenhalger divides the life of a malignant tumor before operating into three periods: 1. Period of latency, during which the host is unaware of the presence of the growth. 2. The time the patient delays before seeking advice, after he is aware that something is wrong. 3. The time which the physician consumes in making a diagnosis.

Now for the first period, at the present time we can offer nothing that will tend to shorten it. As a matter of fact the relative number of cases in which the neoplasm becomes incurable, or inoperable during this stage, is small. For the second period the public must be educated along these lines, and they must seek advice as soon as the lesion manifests itself. The public has been educated in this manner in regard to tuberculosis, so is the time now not ripe for a similar educational movement towards tumors? For example, every woman should be instructed to seek advice of her physician the moment her attention is called to a mass in her breast, or any unusual change or sensation in this gland. Every man should be impressed with the danger of delay in treatment of a small ulcer, or area of hardness in the lower lip or tongue. All people should be impressed that the moment they notice any tumor formation, no matter how small or insignificant, they should seek medical advice at once. If the people can be instructed that the earlier treatment of all tumors is the most important factor in their curability, and that in this stage the operation will also be less mutilating, it is certain that the percentage of cures will be greatly increased. This is clearly demonstrated in recent years, as in strangulated hernia and acute appendicitis, both of which the public has been educated to look upon as diseases that need immediate attention.

To shorten the third period the general practitioners must be impressed with the fact that early diagnosis is essential. The practitioner sees the patient first, so therefore the education of the public belongs to him. He is in much closer contact with the people than the specialists. In this effort to improve the results of surgery the general practitioner and surgeon must work together. The province of the general practitioner embraces the education of the public and of himself. His responsibilities are even greater than those of the surgeon

Diagnosis.—It is of utmost importance for the public to be educated and the practitioners to be keen in their attitudes to small and apparently innocent warts, nodules, scabs, ulcers, pigmented moles, and little areas of induration on the muco--cutaneous border of the lower lip, mucous membrane of the tongue, mouth and skin of the face in an individual over thirty years of age. All of these represent a pre-cancerous lesion, which at any time may take on malignant growth. If removed in this early period, permanent cures are accomplished in the majority of cases. In most of these cases, during the time before activity has begun, the lesion has been comparatively benign.

Pigmented Moles.—Every one should know that an elevated congenital pigmented mole is a dangerous thing to carry around.

Dr. J. C. Bloodgood of Baltimore was the first to call attention to the removal of certain forms of benign pigmented congenital moles, some nine years ago. His statements then made, which were based on a relatively small experience, have been confirmed by the greater experience of the nine succeeding years. He now has records of sixty-five or more cases collected from various sources. In every instance the diagnosis has been confirmed by a pathological examination. Up to the present time there is not a definitely cured case among them. Now it is to be remembered that in every one of these cases there had been a tumor visible to its host for many years previous. Such tumors can be removed under cocaine without difficulty. It seems, therefore, worth while to educate the public to call attention of the physician to such apparently innocent tumors, and also to educate the physician to recognize when their removal should be urged. Of course no harm can be done by the removal of any such growth,

although it may be practically impossible to remove all pigmented areas which are to be found on some individuals. In the records of sixty-five malignant cases, in only three or four were the patients covered by such pigmented spots. In the majority the individual had but one, or at most a few congenital pigmented moles. The mole which had become malignant was never flat, but was distinctly a projecting tumor. It is the opinion of those, such as Dr. Bloodgood, who have studied the subject, that all such moles should be removed, especially when they are exposed to trauma or irritation, such as on the face and extremities, for constant irritation to such areas is prone to stimulate the cells to proliferation with the resulting epithelioma. Carcinoma seldom follows single injuries, but develops more frequently in cases of repeated injury or prolonged and continued irritation. Pigmented spots are entirely different from the definite projection, sessile, or pedunculated, warty, or smooth, pigmented moles.

Treatment.—Excision with the knife, or knife combined with the cautery, has given the best results in the pathological laboratory of the Johns Hopkins Hospital, better than either X-ray, radium, Co_2 snow, liquid air, paquelin cautery, electric needle, or different caustic pastes. But complete excision with the knife is necessary. It is dangerous to excise a tumor without giving it sufficient berth. It is better to leave the mole alone than to excise incompletely. Incomplete removal might cause a stimulus for growth of the remaining cells, as it often does, so it is better to leave entirely alone than not do a thorough operation Incomplete removal in this early stage will give worse results than a complete operation for the same condition in a later stage, if it proves to be cancer.

Suggestions in Treatment.—The public and physicians should be impressed with the importance of immediate and complete removal of any congenital mole which suddenly shows growth, superficial ulceration, or scab formation. The sudden appearance of a tumor of this kind should be looked on as an indication for immediate removal. It might seem true that the relative number of individuals to be saved is small, but certainly large enough to justify the time and trouble in each case to be removed with a good radius of skin and tissue. It is also known that sarcoma of the derma often arises in a congenital nevus, and an acquired or congenital fibroma, or scar-tissue tumor, etc., and in each case it will be found that the pre-cancerous lesion had persisted for some time, and if removed properly in its benign state could have been cured permanently.

Trauma is supposed to be a cause of cancer of the skin, and especially of the female breast. Often a patient will come to you with the history of a blow on the breast followed by a lump. This has proven not to be a primary cause, the condition only made active by a pre-cancerous lesion already present. The trauma was the immediate not the ultimate cause.

Senn says that trauma alone can no more produce cancer than can inflammation occur without the presence of pathogenic micro-organisms, and can only act as an exciting cause in stimulating a pre-existing matrix of embryonic tissue, and this follows Cohnheim's theory as to the formation of cancer, i. e., all cancers arise from misplaced embryonic epithelial cells, which in some stage of life become active and go on to the formation of cancer. The injury usually does no more than to call attention for the first time to the pre-existing tumor or pre-cancerous lesion, and thus hastens its growth. (But trauma has been proven to predispose to sarcoma of bone.)

Classification of Cause.—In classifying the causes which may render pre-cancerous conditions active one should include nerve fatigue. The organs have poor resistance and are thus prone to cancer degeneration. Cancer is a disease of adult life. The patient is the one most interested and he should be informed in the pre-cancerous stage of his disease. The danger of a local irritation of a chronic character has been underestimated. Our present knowledge of the prophylaxis of cancer indicates that all tumors should have a medical examination and the majority of them a surgical consultation. Cancer is generally accepted as a disease of old age, but in a great number of cases the pre-existing lesion has been present for years, and its early recognition and complete removal at the proper time would have aborted this fatal issue later in life.

Conclusion.—Therefore, in conclusion, I might say that in malignant tumors of

the skin there is in most cases a stage when there exists a benign growth or pre-cancerous condition, and if removed properly at this time would have eliminated many fatal issues or loss of limb. But in many surgical lesions technique is ahead of diagnosis. The development of technique is more rapid, because the results of a faulty operation are immediate, while the development of diagnosis is more difficult, especially in tumors, because the results are all more remote. Treatment of tumors which will insure the patient the greatest possibility of a permanent cure with the least mutilation will only be accomplished when surgeons have a better conception of the local growth of neoplasms, both benign and malignant, and are able to diagnose the various lesions of epithelial growth. Therefore, I repeat, that the public at large should be educated to look upon any small skin tumor as a dangerous thing to carry around, and to seek medical advice at once, and the physician should be able to say what treatment should be instituted in each case.

HEMORRHAGE OF THE NEW BORN.

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(Read at Annual Meeting of State Medical Association, July, 1912.)

Few disorders of infantile life are of more interest than the disease known as hemorrhage of the new born. It is apt to confront the physician when he least expects it. It is well not to be in too big a hurry to announce to the family that baby is absolutely normal, for one may feel chagrined to be called in the middle of the night to the bedside of a bleeding baby. In the cases which have come under my observation, there was nothing at the time of birth to indicate that trouble was brewing.

Etiology.—The very fact that so many theories have been advanced as to the etiology of this condition, argues that we are still in the dark as to the true cause in most cases. Infection seems to be a potent factor in many cases. In support of this view, it has been observed that not infrequently many cases occur in quick succession in lying-in hospitals. Haemophilia seems to play a part in some cases. Syphilis is frequently present and is no doubt at the bottom of many cases. Acute fatty degeneration of the blood vessels is mentioned as an etiological factor. Thrombosis of the umbilical vessels or of the ductus Batolli has been observed. Hyperemia of the mucous membranes due to traumatism or asphyxia may be present in some cases. Lack of thrombo-kainaise in the blood has been suggested as a factor. Recently it has been observed that hemorrhage may occur in children after the use of chloroform during labor.

Any of the above conditions may be present in a given case, but in many cases no definite cause can be found.

Pathology. — At autopsy the gastro-enteric tract may be found gorged with dark, haemorrhagic masses. The mucous membranes may appear normal, or erosions, or haemorrhagic areas may be scattered throughout the gastro-enteric tract. The stomach or duodenum may be the seat of the ulcers which do not appear different from those found in the adult. All of the organs are found to be anaemic. In cases due to syphilis, or to other general diseases, the changes usually found in these conditions are present.

Symptoms.—Usually from the second to fourth day after birth the child becomes somnolent or restless. If the temperature is taken at this time, it may be found slightly or markedly elevated. These symptoms are suggestive of impending hemorrhage. There may be vomiting of blood-stained mucus, hemorrhagic stools, hemorrhage from the nose, gums, conjunctiva, umbilicus, vagina, anus, or even from the skin itself. In addition there may be haematomas, hemorrhages into any of the organs, or into the body cavities.

The first sign may be a slight oozing from the umbilicus, or a show of blood on the napkin, or the infant may be deluged in blood without any previous warning. The hemorrhages may occur in quick succession, carrying the child off within a few hours, or a day or two, or there may be comparatively long intervals between them. The prostration in most cases is extreme. Emaciation rapidly ensues until the child may remain but a mere bundle of skin and bones. The skin may be white and waxy looking, or it may be motley or covered with purpuric spots.

The highest temperature usually coincides with most violent hemorrhages.

Prognosis.—The prognosis is grave. Under the old-time symptomatic treatment, sixty per cent die If the hemorrhage is due to sepsis, syphilis, or acute fatty degeneration, the prognosis is much more serious. As to time, hemorrhages beginning within the fourth day are, as a rule, more likely to prove fatal; after the first week, the prognosis is fair; and after ten days, the prognosis is good. In other words, the later the appearance of the hemorrhage, the better the prognosis.

Treatment.—The treatment of hemorrhage of the new born with drugs has not been very encouraging. The following drugs have been given in this condition: calcium chloride, calcium lactate, paregoric, gallic acid, gelatine, local styptics, epinephrine, and many others.

The treatment that is most promising today consists in direct transfusion of blood subcutaneous injection of normal human blood, and various animal sera. The methods used will be illustrated in connection with the treatment of a case and the abstracts of case reports.

I wish first to report four cases treated in the ordinary way.

Case I.—Baby G. Female. Born April 10, 1907. Normal labor, born before I arrived. Eighth child. Apparently normal when born. Family history negative. On second day child became somnolent, and there was a violent hemorrhage from the bowel. Administered paregoric and gallic acid, but with no improvement. On the third day there were two hemorrhages from bowel, and baby died in the evening of the same day.

Case II.—Baby D. Female. First child. Born July 29, 1911. Normal labor. Family history negative. Child apparently normal at time of birth. On the fifth day the child became feverish and restless, and had a small hemorrhage from the vagina. Administered paregoric. There was a fairly large hemorrhage from the vagina on the sixth day, and a small hemorrhage from the same source on the seventh day, after which the ehild made an uneventful recovery.

Case III.—Baby C. Eighth child. Female. Born September 15, 1911. Low forceps delivery. Child apparently normal at time of birth. Family history negative. On the third day the child became restless and developed a temperature of 100° F. which was accompanied by a slight hemorrhage from the umbilicus. Paregoric was administered and tannic acid was packed around the stump of the cord. On the fourth day there was a small hemorrhage from the vagina. The child made a good recovery.

Case IV.—Baby G. Male. Born January 31, 1912. Normal labor. Third child. Family history questionable. Syphilis suspected in the father. On the third day, without warning, child had a large hemorrhage from the umbilicus, saturating its clothes. Administered paregoric and put on a tannic acid dressing. There were two other large umbilical hemorrhages—one on the fourth and one on the fifth day. Child made a rapid recovery.

Case V.—Baby X. Female. First child. Born April 13, 1911. Normal labor. Delivered by Dr. W. W. Golden. Family history excellent. As Dr. Golden was called out of town for a few days, Dr. O. L. Perry and the writer took charge of the case. On the evening of the second day there was a marked hemorrhage from the bowel. There was more bleeding during the night. On the third day there were four large hemorrhages from the vagina, saturating the napkin each time. On the morning of the fourth day there was another marked hemorrhage from the vagina. By this time the child was almost exsanguinated. It was in a state of stupor, made no effort to nurse, the skin was motley, dry and harsh, and seemed to be closing right down upon the bone. The child was apparently in a dying condition. In our desperation we were willing to try anything, since the ordinary treatment did no apparent good.

Accordingly, on the morning of the fourth day, we withdrew a quantity of blood from the right cephalic vein of the father, and without waiting for the serum to separate, injected 10 c. c. subcutaneously bewteen the scapulas of the child. This was at 11 A. M. At 3 P. M. of the same day 10 c. c. more was injected. This still contained much of the solid elements of the blood. At 10 P. M. 5 c. c. of human blood serum was injected. By this time the child showed marked improvement. The hemorrhages were reduced to a mere stain, the child cried and was able to nurse. There still being a show of blood, on the fifth day the child received 10 c. c. m. of human blood serum in two doses. From this time on the baby improved and made an uneventful recovery.

To me this case was a source of a new inspiration. To watch the normal color of the child returning, to see it rousing as from a slumber, to hear its lusty cry, and to see it able to nurse, when on the day before we were ready at a moment's notice to call in the undertaker, it certainly was a pleasant sight to behold.

A case that attracted a great deal of attention was the one reported by Lambert in the *Medical Record*, May 30, 1908. This little patient was moribund from hemmorhage. Dr. Carrel of the Rockefeller Institute was called and did a direct transfusion between father and child. The child at once regained its normal color and began to cry and was able to nurse. Convales-

cence was rapid and complete. Lambert concludes that the condition was undoubtedly due to a chemical change in the blood, as sepsis or structural degeneration of the blood vessels could be excluded, since these conditions could not have been overcome so soon.

Dr. J. E. Welch of New York reported nine cases in the *American Journal of the Medical Sciences*, for June 1910, in which normal human blood serum was used subcutaneously. Most of the cases were of an extreme type, and all recovered. Certainly a significant fact, as of eighteen cases treated in the ordinary way, seventeen died.

Green and Swift (*Boston Medical and Surgical Journal*, March 30, 1911) reported fifty-one cases treated by gelatine, calcium chloride, local styptics, and especially rabbit serum. The latter is given in 30 c.c doses, repeated two or three times if bleeding persists. Since their mortality was fifty per cent, it would seem that rabbit serum is of little avail.

Schloss and Commiskey (Vol. III, No. 4, *American Journal of Diseases of Children*) report nine cases of hemorrhage treated by the subcutaneous injection of whole human blood with two deaths. They direct that from 10 to 30 c.c. of whole human blood be administered every four to eight hours as long as bleeding persists. They state, "In the treatment of such cases an immediate transmission of human blood is probably the only means from which any result could be expected."

Conclusion.—In view of the good work that has been done, the physician would be derelict to his duty if he did not stand ready to administer blood serum, whole blood, or do a direct transfusion in cases of hemorrhage of the new born. In the hands of an expert, no doubt direct transfusion is the ideal treatment. But the other methods are so simple that any one familiar with ordinary surgical procedure can carry them out. Any one who can administer a dose of antitoxin can administer blood serum or whole blood, for it is administered in the same way. The blood and serum are quickly absorbed, perhaps within five minutes.

As to the dangers, there need be no fear, or practically none, from anaphylaxis when normal human blood serum is used.

Discussion. Dr. Holland has had some experience, and has had good results from the use of blood serum. No doubt the best treatment yet suggested. Dr. Ogden said that he saw three cases within one month, all occurring on the ninth day after birth. Transfusion of blood from another person has given excellent results. Dr. Sharp remarked that this is a most interesting subject. He had seen it but a few times in his more than 1200 labor cases. In most cases the hemorrhages set in after the separation of the cord. He had found it most frequent in the male. If the bleeding is from a navel vessel, it can be ligated. Dr. Moore, closing, said that this trouble occurs about once in a thousand cases. Thinks it is as frequent in females as in males. What is sometimes called precocious menstruation is nothing but hemorrhage from the uterus or vagina of the infant. As to cutting and tying the cord, the more this is done the worse the hemorrhage.

THE TREATMENT OF NON-UNITED FRACTURES.

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(Read at Annual Meeting of State Medical Association, July 11, 1912.)

It is indeed fortunate for the patient, and the physician or surgeon, that most fractures, when properly replaced or set successfully, heal, and there is generally a complete recovery as far as use is concerned, in anywhere from four to ten weeks. Nature endowed the human body with the several different tissue make-ups and bone, being of connective tissue formation, should readily repair, but this is not always the case, and there are several reasons that should be taken into consideration.

At first we will discard the causes of an imperfect replacement or non-approximation of the parts, and again the probable presence of foreign tissues, such as tendons, muscles, etc., between the fragments, and there are many constitutional diseases, such as, scurvy, tuberculosis, alcoholism, or syphilis, and rickets in the young, that should be excluded.

We seldom see many non-united fractures in children unless they are of rickety origin. Then sex also plays a part, for more men are exposed to injury than are women. Age also plays a part, for the older the patient the larger the medullary

canal, and there is not an increase in salts as some have formerly said.

The non-union of fractures seems to occur in persons who have a lack of lime salts in the blood, or the throwing down power of such, for the patient seems to be apparently healthy in every other respect, connective tissue formations, etc., but the lime salts seem to be absent.

Pathology.—Before going into the treatment of this form of fractures, I will ask your attention for a few minutes to the pathology of any fracture, for the treatment that has been recommended by some of the most successful surgeons will be brought to your attention in this paper.

A fracture is uniformly accompanied by hemorrhage from the bone and surrounding tissue, the amount depending upon the extent of the fracture, the amount of contiguous tissue laceration, and the location.

The clot plays only a part in the bony tissue that is to follow, for only in a short while it disappears and is followed by the vascular or germinal tissue which envelops the bone. The fractured bone is united by granulation tissue called callus. "It is the product of cell proliferation of those tissues directly concerned in the growth and development of bone."

There are three varieties: (1) external; (2) internal; (3) intermediate or definite.

(1) The external is deposited as fusiform swelling ensheathing the two broken ends of the bone. It is abundant and is the cell proliferation of the periosteum, which acts as nature's splints when the fragments are not well immobolized and the fracture is surrounded by a cushion of soft parts, until the definite callus unites the bones permanently.

(2) The internal callus is cell proliferation of the medullary tissue. It takes the place of medullary tissue in fractures of long bones and serves as a fixation for the fragments. It acts as a supporting pin, it is transformed into permanent tissue, and is therefore a permanent structure. The external callus is only temporary, being absorbed when the permanent or intermediate callus has united the bone firmly and permanently.

The first week absorption of the clot takes place, the second week formation of plastic lymph and beginning organization. According to the size of the bone, the ossification of the callus requires from four to eight weeks. The absorption of the external and internal callus requires about one year.

Then we must consider the methods of increasing the lime salt constituency of the blood, or the throwing down power of such, and secondly, the increase of the amount of blood to the seat of injury. For the first we may use calcium in the form of the hyophosphites or the lactophosphates.

Taking into consideration the large amount of calcium phosphate normally present in the bones and tissues, we may well regard the hypophosphites and the lactophosphate as two of the most efficient drugs in the treatment of the starved body. Personally, I believe that the lactophosphate is the most efficient of the lime salts in the treatment of these cases, for the reason that it is not formed into the phosphates on direct entrance of the stomach.

Thyroid gland is of particularly great importance, and while the chemistry of such is at present in doubt, some of the best authorities say that it contains chiefly a neucleo-proteid, which stimulates the respiratory and cardiac centers in the medulla, and the globulin whose function is to stimulate all other tissues and organs.

All the surroundings, and the habits, diet, etc., should of course be hygienic, regular and wholesome.

The local means of increasing the blood supply to the seat of fracture may be applied in one of several ways. Nature's first aid to an injured part is to send the life-saving hyperemia, and this not only gives us our clot, which is later followed by a vascular tissue or germinal tissue, enveloping the bone, but also stimulates leukocytosis of the surrounding tissues.

Some surgeons use the absorbable ivory pins, others steel plates, but to us the silver plate has been the most satisfactory (not including joints to which wire or pins are most applicable).

The silver plate is the most applicable for the reasons following; it is most easily sterilized, and you can adjust it or cut it very easily, or drill it so as to adapt it to the particular conditions of the case.

The ends of the bone should be roughened or refreshed before the application of the plate, and this in itself leaves small

crevices for the retention of the clot, and germinal tissue to wedge itself, and if the ends are filled with a solid mass of bone tissue you should use a drill or burr in both until the medullary canal is reached, and this may be enlarged. This allows the passage of blood in greater quantities, and will later restore the medullary canal, and give nutrition towards the cortex. The bones should not be left smooth, as this does not leave room for a clot.

The silver plate should be applied over the periosteum, and in most cases it is impossible to satisfactorily peel the periosteum in such cases, and the periosteum which throws out the ensheathing callus or nature's splint, should not be interfered with any more than possible, and the plate is much more easily removed should it become irritable. The size of plate and number of screws will be judged according to the seat of injury.

I will only report one case; in this case we used eight screws and a plate five inches long, for the reason that this patient was a very large-boned man.

I believe that just as absolute immobility should be had as possible, until the definite callus unites the bone firmly and permanently.

These wounds should be closed without drainage, but this particular case having been operated on several times unsuccessfully before coming to us, and the seat of injury being open we put in a drain.

Should these plates become irritable after the ninth or tenth week they should be removed, as was done in this case.

Lastly, hyperemia should be produced by placing an ordinary rubber tourniquet some distance above the seat of injury, daily for fifteen to twenty minutes with just enough pressure to produce a venous congestion, and when this is released, the artificial stimulation is what benefits the parts in the way of more calcined blood and more nutrition to the part.

These patients are allowed to get up on crutches from the fourth to the sixth week and the extremity is encased in some kind of splint or plaster cast.

HISTORY OF THE CASE.

Patient, white, age 44 years; road foreman of engines; weight 185. On June 28th, at 11:40 a. m., 1911, he received a compound fracture of the right leg, both bones, about four inches above ankle joint. Reached hospital 4:30 p. m. Clean break found in apparently good shape. At time of injury in the best of health with above weight. No history of any constitutional disease of any kind.

Leg put in splints and kept in bed 28 days, at end of which time there was still mobility at seat of injury. Leg then put in plaster cast and kept in same for 64 days, having been changed at intervals of about 15 days. At changes of cast, mobility was still present with no improvement. Patient allowed to use crutches on application of cast.

At end of three months no improvement in injury, it was exposed to the X-ray and bones found to be overlapped. Patient weighed at this time 192 pounds.

September 30th, returned to hospital, and operation enclosed bones overlapped, steel plate applied to the overlapped bones and patient kept in bed 15 days.

Patient then allowed to get up and walk on crutches. The plate was removed in four weeks, bones supposed to have been united. At expiration of ten weeks after application of plate the mobility was still present with no improvement.

On consultation electric treatment with salt pads advised for hardening of bone. Gave improvement in the surrounding tissues in better circulation, etc., but no improvement in the break.

Patient admitted to our C. & O. hospital on January 21st, 1912. Seat of injury mobile, and X-ray showed overlapped condition of the bones. Operated on 26th January and bones found as above, which were corrected and roughened and approximated, a silver plate five inches long was applied with eight screws to the tibia. Patient was put to bed, with anterior and posterior external splints, with dressing changed every few days for the first two or three weeks, and then every week or so.

Patient was kept in bed for seven weeks, then allowed to get up and walk with aid of crutches. Gradually weight was allowed to be put on the leg. The plate was removed at the expiration of ten weeks and wound allowed to close.

Selections

WHOOPING COUGH—ITS NATURE AND PREVENTION.*

A Popular Discussion of a Widespread and Dangerous Disease for Which Familiarity Has Bred Contempt.

By W. C. Rucker, Assistant Surgeon General, United States Public Health Service.

Whooping cough, mumps, measles, German measles, and chicken pox, are with us so constantly that we have become accustomed to them and now regard them as the almost inevitable accompaniments of childhood. Many a mother has exposed her child to these diseases, firm in the belief that she was performing a good act and in ignorance of the jeopardy in which she placed the life of one whom she loved, yet it is safe to say that these common diseases not only take a heavy toll of the children of our land directly, but that they are also followed by results which may cripple the child or shorten its life. Of all the deaths registered in the United States during the year 1910, 30.7 per cent occurred in children under 15 years of age; 19.2 per cent was among children under 1 year of age, and 23.3 per cent in children under 2 years of age. Aside from the deaths which occurred from dietetic causes during this period, the common infectious and contagious diseases were responsible for this high mortality. During the year 1910 the death rate per 100,000 population from measles was 12.3, from whooping cough 11.4. Scarlet fever, which is ordinarily considered a very serious disease, had a death rate for 1910 of 11.6 per 100,000 population, while diphtheria had a death rate of 21.4 per 100,000.

Whooping cough is one of the most serious of the diseases of this class in its immediate and remote effects. German statistics covering a period of 11 years show that the mortality among those attacked with this disease is, under one year of age 26.8 per cent; between 1 and 2 years of age, 13.8 per cent; between 2 and 5 years of age, 3 per cent; and between 5 and 15 years of age, 1.8 per cent. The disease is not infrequently complicated by inflammation of the lungs, and the violent coughing which occurs is apt to produce a harmful dilatation of the lung tissue itself. It is by no means uncommon in underfed children for the disease to be followed by tuberculosis of the lungs. Cases of paralysis complicating whooping cough have been reported, and changes in the eye due to hemorrhages into that organ produced by coughing have also been noted. It is thus seen that whooping cough, which it is estimated killed over 10,000 American children in the year 1911, is a disease seriously affecting the public health and demanding earnest attention.

The name we have given to the disease is descriptive of the peculiar cough associated with it. The disease is highly contagious and is accompanied by inflammation of the lining membrane of the breathing tubes, and a characteristic and far too familiar whoop As already stated it is particularly prone to attack children, and few persons arrive at maturity without having had the disease. Should they escape from it during childhood they are almost certain to have it in adult life. The disease is particularly fatal in children at the breast and the very aged.

The cause of whooping cough is unknown. Many investigators have endeavored to discover it, and not a few have described germs of one sort or another which they believe to be responsible for the disease. As yet none of these organisms has been fully proven to be the causal agent. On account of the fact that epidemics of whooping cough and measles frequently occur coincidentally, it has been thought that the diseases were nearly related. It is more probable, however, that the only relation which they bear to one another is that of the overcrowded and unhygienic conditions which predispose to their spread.

It seems to be pretty well proven that the disease is transferred from one person to another by fairly close contact only, and that the sputum is the medium in which the disease germs leave the body of the person having the disease. During the violent coughing the sputum is thrown a con-

*Reprint from the Public Health Reports, Vol XXVII, No. 43, October 25, 1912.

siderable distance from the victim in the form of a fine spray, and it is in this way and also by means of handkerchiefs, napkins, bedclothes, and the like which have been recently sprinkled with the infected sputum, that the disease germs are carried. The infectiveness of the sputum is most marked during the height of the disease, and it is active at all times during the attack. It is also believed by some to be transmitted for three or four weeks after the last whoop is heard.

The exact period of incubation is not known. Observations seem to show that it varies from 2 to 10 days.

The child at first has the symptoms of an ordinary cold in the head and thorax, accompanied by sharp nervous coughs which have a tendency to come in a series This gradually increases until there is a succession of violent coughs accompanied by a feeling of suffocation and flushing of the face. It is frequently stated that the child "coughs until it is black in the face," and this is not an inaccurate description. As soon as the cough has ceased, the little sufferer endeavors to fill up its lungs again, but there is a nervous spasm of the muscles of the throat which narrows the opening through which the air must pass. The violent attempt to inspire the air through this small space produces the familiar "whoop" from which the disease receives its name. In mild attacks the child may cough only once or twice a day, but in other cases the seizures may occur every few minutes. If the child is kept quiet, the paroxysms occur less frequently. They may be brought about by the inhalation of dust or by excitement. Laughing, crying, eating, or drinking may also provoke them. Not infrequently the violence of the cough may cause vomiting or the involuntary passage of urine or feces.

In very severe cases there may be a bleeding from the nose or into the whites of the eyes, and blood may come from the ears or the mouth. It used to be thought that the disease was caused by a little ulcer beneath the tongue, but it is now the belief that the ulcer is caused by the rubbing of the tongue over the lower téeth during coughing. In the early stages there is fever and the child is very restless. There is apt to be loss of appetite and because of the vomiting which takes place the children lose weight and become weak. In the early stages the eyelids are reddened and swollen, and the face may look puffed, particularly during the cough.

No child should be allowed to go through an attack of whooping cough without intelligent care and attention. This is indeed a very serious disease and it is unfortunate that custom has led many mothers who do not realize the dangers in the way of complications and after effects, to nurse the child through the attack without skilled assistance. Under proper treatment the suffering of the child can be very much reduced, the course of the disease may be shortened, and the dangers from complications greatly lessened. It is not only important for the child sufferer to be under treatment; his parents should also be instructed as to the methods of preventing the spread of the disease.

In the absence of complications children having whooping cough should be kept in the open air for 24 hours out of the 24. They should be well clad, the clothing being heavy enough to prevent chilling and light enough to prevent the child from becoming overheated or tired by the weight of the clothing. As long as the child has fever or is weak it should be kept in bed. The bed should be placed on a porch or in a tent on the roof or in the yard. The sides of the tent should not be put down except for the purpose of keeping out rain. The bedclothes should be so arranged that the covers can not be kicked off. The child should wear woolen pajamas, and if there is involuntary evacuation of urine or feces, a diaper should be substituted for the trousers. Inasmuch as dust provokes the paroxysms of coughing it may be necessary to sprinkle the roof or yard in which the child is kept. The diet should be such as can be easily and quickly digested. Soups, pasteurized milk, eggs, and the like should be given frequently. The matter of the treatment of the disease is one to be left to the physician attending the individual case.

As has been shown before, the cause of whooping cough is found in the sputum of persons having the disease. During the paroxysms of coughing this infected sputum is thrown a considerable distance. The first thing to do in the prevention of the spread of this disease is to prevent the sputum from the sick being taken into the sys-

tem of the well. The sufferer should be provided with a quantity of soft paper napkins. As soon as these are soiled they should be burned. Everything which has come in contact with the patient should be sterilized before it is allowed to come in contact with other people or things which may be handled or used by other people. Bedclothing, napkins, table linen, towels, and the like may be sterilized by boiling.

Children having whooping cough should not ride in street cars or other public conveyances, nor should they attend schools, Sunday schools, or other places of public congregation. Well children should be taught that they must not come in close contact with children who "whoop" and as a method of protection against not only whooping cough but many other diseases, they should be thoroughly instructed as to the dangers of trading gum, exchanging pencils, and the other means by which sputum may be transferred from one person to another. The habit of spitting on the hands in playing baseball and of promiscuous kissing should also be discouraged. If it is necessary that children having whooping cough should go upon the street, they should be plainly tagged, so that other children may be warned. The Virginia Health Bulletin suggests the wearing of a broad band of green ribbon on the arm for this purpose, and it is believed that this method would prove efficacious.

Houses in which cases of whooping cough exist should be marked with an appropriate placard.

Any disease which kills 10,000 children per annum is a serious one. If bubonic plague were to kill that many children in the United States in one year, the whole world would quarantine against our country. A child dead of whooping cough is just as dead as a child dead of plague. A child whose body is weakened by disease is a potential economic loss to the Nation. Whooping cough is a danger to be avoided and combated in the interest of humanity and the citizens of tomorrow.

A foreign body in the nose of a child is often suggested by a discharge of mucus from one side only.—*American Journal of Surgery.*

THE SPONTANEOUS CURE OF MALIGNANT DISEASE.

By Alexander Marcy, Jr., M. D.
Riverton, N. J.

The term malignant disease as used in the title of this paper is meant to apply particularly to carcinoma, and the question of its spontaneous cure is one of very great interest. It is the concensus of medical opinion that surgery can and does cure cancer if applied sufficiently early, and does it by thoroughly removing the disease while it is localized. It may also be removed by methods other than the knife and in this way cured, but here also it is because the diseased tissue is entirely removed before it has had a chance to invade any other part of the body.

But is malignant disease ever cured spontaneously even after it has existed long enough to have become established in different parts of the body by so-called metastasis? This is a question which I think can be answered in the affirmative, and a sufficient number of cases have been reported to substantiate such a statement.

As to how such cures are accomplished and by what means they are brought about I think we are not at this time ready to speak with certainty, but reasoning from analogy, and in view of the results obtained in the experimental study of this disease, we may conclude that there is developed in the system of the person so affected, through some biochemic change, an antibody which has overcome the pathologic process that has been going on and which had produced in a certain part of the economy the carcinomatous disease. The exact nature of these changes, how and why they are produced, etc., it is not my purpose to take up in this paper, but we may consider this phase of the question still undetermined. While much has been accomplished there is still more work to be done in order to elucidate this part of the subject and it can only be properly done by the laboratory worker and the experimentalist. I wish to place on record another case of malignant disease which has been symptomatically cured.

H. R., colored, widow, age 55, has had five children, always worked very hard. In

September, 1908, she came under my care complaining of loss of strength and ambition, great back ache and distress in lower abdomen. Careful examination showed nothing wrong with heart, kidneys, liver, stomach, etc. She had an enlarged uterus, a lacerated and hypertrophied cervix, and a lacerated perineum; there was complete procidentia, as well as ptosis of all the intra-abdominal organs.

I advised operation, which was promptly refused. I then tried all kinds of mechanical support, together with rest in bed, tonics, etc., but to no purpose. I insisted on operation and at last she reluctantly consented. November 11th, 1908, she was taken to the hospital. The pre-operative history showed nothing outside of the pelvic lesions.

She was operated on November 23rd, the usual plastic work being done. The post operative history was uninteresting, it being afebrile and uncomplicated. She was discharged from the institution December 5th, 1908.

She continued to improve in health after her return and in a few months said that she felt better than she had been feeling for years. She was able to resume her household duties and for a short time her general health was very good.

April 1st, 1909, I was called to see her and found her in bed with what seemed like an attack of influenza, fever, pains in various parts of the body, chilly sensations, cough, etc. She told me that she had not been feeling as well of late, had been losing flesh and strength, had considerable digestive troubles, pain, nausea, poor appetite, etc. I examined her carefully and could find nothing particularly wrong excepting the acute attack of influenza. There was some pain and tenderness in the epigastric region, but nothing could be made out at this time. She soon recovered from her acute illness but continued to lose flesh and strength, developed a troublesome cough, had increased epigastric pain and tenderness and in every way showed evidences of some serious organic disease. She was repeatedly examined, her lungs, heart, kidneys, liver, etc., still showing no evidences of disease, her blood count was normal, excepting for a slight secondary anemia. She continued bed-fast and lost flesh and strength rapidly. Repeated examination of the abdomen finally revealed an indistinct epigastric mass which was slightly tender to the touch and suggested a malignant tumor connected either with the stomach or pancreas. Soon after this was discovered a nodule appeared under the skin in the left hypochondriac region slightly below the costal border and outside the abdominal wall, apparently in the cellular tissue. This was hard, irregular and somewhat sensitive when manipulated. A similar mass was discovered on the right side. They gradually developed in size until they became as large as one's fist. The intra-abdominal growth became more and more evident until it was as large as one's head. During this time her general health failed very noticeably. She vomited after taking food, complained of almost constant pain, had a rapid pulse, but no rise of temperature. She continued to lose flesh and strength, developed general anasarca, ascitic fluid appeared in the abdominal cavity and every indication pointed to an early termination of the case by death.

In the early history of her illness the patient was treated actively with mercurials and iodides in large doses with the idea that the case might be a specific one. No improvement following this line of treatment, she was treated for a possible tubercular lesion, but nothing in the way of specific treatment seemed to do any good and the case went on from bad to worse. Realizing the futility of further medication, I finally settled down to palliative and expectant drug medication, with such food as she could be persuaded to take, an unfavorable prognosis given, and her friends and family told that there was no hope of her recovery. As time went on and she did not die, I began to get interested in her local lesions again and found that they were getting unmistakably smaller, her general condition seemed better, and I began to realize that she was suffering more from the drug habits that she had formed than she was from the disease for which they had been given. My efforts now were directed to overcoming this condition and by the time I had succeeded in accomplishing this I found to my astonishment and delight that every vestige of the tumors had disappeared. I got her out of bed, gradually down stairs and out-of-doors. Today she seems to have recovered entire-

ly, and barring the fact that she is still somewhat anemic, neurasthenic, and not quite up to her usual weight, should regard her as practically well.

During her illness she was carefully examined by Drs. Boysen, Stokes and Robert N. Wilson, and they all agreed that she was suffering from a malignant disease, probably carcinomatous, and all gave an unfavorable prognosis.

There are two questions in connection with this case that are both interesting and important. The first is, was this a case of malignant disease? Personally I believe it was, and yet I have no means of positively proving it. In an experience of thirty years I have seen quite a few cases of malignant disease of the abdominal organs, and in every clinical aspect this case resembled those that I have seen come to autopsy. The second and perhaps most important question is, do cases of carcinoma ever recover spontaneously?

Dr. Eugene Hodenpyle reports such a case in the *Medical Record*, February 26th, 1910, as follows:

"Case one of carcinoma of the breast. Woman aged 37. The clinical history and morphology of the tumor were typical of rapidly growing cancer. In spite of radical operation, multiple recurrences appeared in the neck and in the primary scar. These were thoroughly removed and secondary growths appeared which were also typical of rapidly growing carcinoma. Still other tumors developed in the neck and breast, which were not removed owing to the debilitated condition of the patient. Later large tumors developed in the liver, which nearly filled the abdominal cavity, followed by the recurrence of excessive chyliform ascites. The prognosis was unqualifiedly bad and death seemed imminent, but nevertheless the tumors in neck and breast gradually dwindled and disappeared. The abdominal tumor grew smaller and became imperceptible. Four years after the first operation we found the liver approximately normal in size and position, and with the exception of the scars, slight but decreasing emaciation, and extreme chyliform ascites, which requires frequent tapping. There is no indication of the original trouble."

Dr. Robert N. Wilson gives me the following history of a case which came under his care: A woman aged 40, always well but never robust, was taken suddenly ill with acute abdominal pain, which was not localized, but was persistent; this was the beginning of an illness that kept her bedfast for ten months, during which time she lost flesh and strength. Before the beginning of the acute illness she was conscious of the loss of some flesh and did not feel normally vigorous. When Dr. Wilson first saw her the abdomen resembled that of a woman in the sixth month of a pregnancy. It was hard and resistant to palpation, only slightly tender, flat on percussion, etc. There was plainly felt a tumor extending over the entire lower half of the abdomen, this was freely movable. The vaginal opening barely admitted the forefinger, which touched a hard mass about two inches from the opening; through the rectum the same hard mass could be felt; the diagnosis was probable malignant tumor of the lower abdomen, and exploratory operation was advised. On opening the abdomen the mass was found to fill entirely the pelvis and there was such extensive involvement of the bowels, as well as of the pelvic organs, that its removal was out of the question; the incision was closed and an unfavorable prognosis given. The diagnosis was inoperable malignant growth. The patient recovered from the operation and was soon well enough to return to her home, where she is still living and in better health than for years. It has now been nine years, and at this time there are no evidences of a tumor in her pelvis.

These cases, together with a number of others which have been reported, seem to me to prove conclusively that cases of malignant disease do recover spontaneously, and it is highly probable that we will some day, and that perhaps very soon, be able to explain how these cures are accomplished.

A number of cases of the spontaneous cure of cancer have been reported in the various medical journals, the most noteworthy of which are sixteen cases by Drs Gaylord and Clowes, in the *Journal of Surgery, Gynecology and Obstetrics*, Chicago, June, 1906. These cases will all bear critical examination. The investigators mentioned showed that spontaneous cure of cancer in experimentally inoculated mice occurred in about 23 per cent of

animals. They intimate that spontaneous cure in the human being may be more frequent than is generally supposed and they believe in the existence of immune forces capable of terminating the disease. Another excellent paper on this subject is that of Czerny (*"Ueber Unerwartete Krebsheilungen," Ztschrift f. Krebsforsch,* Berlin, 1907, v. 27-35). This author refers to eleven cases of gastroenterostomies performed on patients suffering from malignant disease who remained well from two to fourteen years after operation. The malignant growths showed undoubted retrogressive changes.

Other important contributions are those of W. S. Handley in the *Medical Press and Circular,* London, 1908, on "The Natural Cure of Cancer;" that of A. Sticker, in the *Ztschs. f. Krebsforsh,* Berlin, 1908, v. 55-68, and of H. D. McCulloch in the *British Medical Journal,* London, 1908, 1146-1148.—*Jour. Med. Soc. of N. J.*

THE VALUE OF VERATRUM VIRIDE IN THE TREATMENT GF ECLAMPSIA

The very wide-spread employment of veratrum viride by many practitioners, particularly by those who live in the southern portions of the United States, for the purpose of combating puerperal eclampsia has led many others to employ this drug, although it must be admitted that our knowledge of the underlying conditions of eclampsia and of the physiological action of veratrum viride make its use largely empirical.

The most recent noteworthy contribution upon this subject, with which we are familiar, is one which is made to the *British Medical Journal* of September 19, 1908, by Mangiagalli, of Milan, who, after pointing out that this remedy has been employed ever since 1836 in the United States for the purpose under discussion, approves of its use, and states that a paper presented to the International Congress of Obstetrics in Geneva in 1896 by Theophilus Parvin, the late Professor of Obstetrics in the Jefferson Medical College, led him to employ it. He now reports his personal experience founded upon 100 cases covering the space of a little over ten years. He believes the method of administration of veratrum viride for this purpose has much to do with the results which are obtained At first he used Squibb's fluid extract, but more recently he has employed the extracts made by Parke, Davis & Co., Merck, Erba, and Zambeletti.

He firmly believes that the only satisfactory method of administration is by means of the hypodermic needle, and that as long as the blood-pressure is high and the pulse full, strong, and tense, it is necessary to continue the administration of the remedy. He thinks that small and repeated doses are to be preferred to large ones given at long intervals, since in this way good results are obtained, and danger is eliminated. He also indorses the view held by many American practitioners that the pulse may be kept, if possible, below 80 beats per minute, but that when the pulse is rapid and small, and arterial pressure low, veratrum viride must not be employed, a conclusion which we reached years ago, and have always taught since.

In his clinic Mangiagalli uses the sphygmomanometer to determine whether veratrum viride should be given, and employs the drug whenever the pressure exceeds 160 millimeters, the dose varying from 5 to 10 minims of the fluid extract. In his experience the veratrum viride not only lowers the blood-pressure but modifies or stops the convulsion, although it cannot be claimed to be an antidote to the poison. In his 100 cases, 71 were in primiparæ; three were moribund when admitted to the hospital and died in from a few minutes to two hours after their admission. In three others evident symptoms of cerebral hemorrhage were present and were found afterward at autopsy. Excluding these six cases he finds that out of the remaining 94 only six deaths occurred, the mortality being therefore 6.34 per cent, and if all the other cases are included the mortality does not amount to more than 12 per cent, as compared to a mortality of 23.68 per cent obtained by him in the previous ten years, before the use of veratrum viride. The statistics of others who have used veratrum viride vary from 16 to 37 per cent.

Mangiagalli also reports an interesting case of extrauterine pregnancy in the eighth month complicated by eclampsia, in which the fits ceased completely after the

use of veratrum viride and a living child was extracted by laparotomy, which would seem to indicate that the drug was not deleterious to the fetus. In concluding his paper Mangiagalli asserts that veratrum viride is efficacious in the treatment of this condition, and that most probably its efficiency is dependent upon its ability to lower arterial tension.—*Editorial in Therapeutic Gazette.*

ENURESIS.

James Burnet, in the *International Clinics, Vol. IV 21st series,* discusses enuresis with special reference to its causation and treatment. In pediatric practice enuresis is a very common and familiar picture. It is one which often taxes the physician's skill to the utmost in order to bring about a cure. Speaking generally, he believes that too little attention, as a rule, is paid to the probable causation, and too much reliance is placed on routine treatment by means of belladonna. Regarding the causation of enuresis great care must be taken to discover the etiological factor underlying the condition in every case. It is because the practitioner usually does not take time to find this out that his treatment proves so unsatisfactory in the majority of cases. To begin with, mental defects must always be excluded. Bedwetting may be a manifestation of nocturnal epilepsy. In some cases the incontinence has existed since birth, and here we have usually to do with children of neurotic disposition. Where the condition is acquired the most frequent cause by far is simple nervousness, produced it may be by inheritance, or more frequently by the strain of school life. In some cases there appears to be a definite heredity. The nervous factor is probably here the predominant one. Enuresis and night-terrors sometimes accompany each other, and in one of these cases under his observation the child was distinctly rheumatic. An examination of the urine should be made in every case, and if need be, it should be centrifuged and the deposit so obtained carefully submitted to microscopic investigation. As regards treatment, if the urine is at all acid treatment by alkalies is to be strongly recommended. In the ordinary nervous cases tonic treatment is best. The child should be taken away from school and sent to the country, preferably the seaside. A cold spinal douche before going to bed is often very beneficial, and this may be followed by massage with a flesh glove. No fluid should be given for two hours before the child retires to rest. Sometimes we may aid the patient by raising the foot of the bed and by seeing that he lies on his side and not in the dorsal position. As to drug treatment, he considers it quite secondary in importance. When drugs are used the best results will be obtained by giving strychnin, either alone or in combination with atropin. The latter is preferable to belladonna and certainly gives better results. Many cases, however, do well with strychnin alone, and certainly seem to be cured more rapidly than are those cases in which belladonna is given. He cured one case in three weeks which had been under belladonna treatment for several months, by giving a teaspoonful of cod liver emulsion thrice daily, combined with spinal douching and careful dieting. Of treatment by thyroid extract he cannot speak favorably. He has tried it in a few cases, but without success; in fact, in one case the child became distinctly worse and the remedy had to be abandoned. Ergot, ergotin and chloral have been employed, and occasionally the addition of bromides may be beneficially used, especially in those cases associated with night terrors and frightful dreams. He has had no personal experience with electricity, and is rather inclined to doubt its beneficial effect. As to the injection of saline solution into the sacral canal, he thinks that its effect is largely a psychical one. Above and beyond every other cause, the importance of school strain, especially in nervous children, must never be lost sight of; and in every case he strongly insists on complete rest from school work and, if possible, a holiday by the seaside.—*Cleveland Medical Journal.*

INCREASE AND PRODUCTION OF LABOR PAINS WITH PITUITRIN

R. Stern, Breslau, *Zentralblatt fur Gynakologie,* August 5, 1911.

Numerous reports have shown that subcutaneous injections of pituitary extract increase labor pains and cause post-partum contraction of the uterus. The author has used the extract to induce labor. In two cases of multipara, in the 36th and 39th week, respectively, injections of 0.6 (10 grains) inaugurated uterine contractions which lasted for several hours. The injections were repeated after a wait of 6-10 hours. In the first case labor was completed after three days, in the second after four days. The same treatment was used in a woman who suffered from tuberculosis, but had reached only the 32d week. After three days only slight dilatation had been obtained. A metreurynter likewise produced no pains, but when another dose of pituitrin was then given labor promptly set in.

In two cases of early pregnancy the drug produced labor pains, but no evacuation of the uterus. Evidently a certain irritability of the uterus must be present to permit of effective result. Further study may show that pituitary extract will prove to be a simple and innocent means of inducing labor at term.—*Am. Jour of Surgery.*

WE MAKE HOUSEHOLD PETS OF THEM IN AMERICA.

GENEVA, March 6.—"Doctor" Joseph Unterberger, a Christian Scientist, advertising himself as a "natural healer of all diseases," has been tried at the court of Canton of Appenzell for causing the death of a woman "by lack of medical knowledge and neglect" and sentenced to a year's hard labor and costs. He is expelled from the canton and is prohibited from exercising his "profession" in Switzerland—*Telepraphic News, N. Y., Times, March* 7, 1912.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*
ASSISTANT EDITORS
L. D. WILSON, A.M., M.D., G. D. LIND, M.D., Ph.D.,
C. A. WINGERTER, A.M., M.D, LL.D.

WHEELING W. VA., JANUARY, 1913.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

We are in need of a copy of the Journal for June 1910.

We can save a little for any one who expects to attend a Post Graduate school in New York. Write us.

A GOOD MOVE.

We are glad to make a place here for Dr. Wingerter's account of the recent meeting of representatives of the State Board of Health and the State Medical Association. These bodies should always work in harmony, as they are composed of the leading men of the profession, and with very few exceptions all are members of the State Association. Both bodies desire to promote the public health, and we are quite sure that this movement looking to some needed changes in the laws and to an increased appropriation from the legislature during the present session for public health purposes, is an absolutely unselfish one. The fact that other states are spending money by the hundred thousand annually for the prevention and cure of diseases, while our state, that boasts of being one of the most progressive, expends but $1,500.00 is a reflection on the state. The State Board of Health is supposed to do something toward the improvement of hygienic conditions throughout the state, and the consequent diminution of disease and death; and yet it receives the above pitiful sum which is barely necessary to pay to the Secretary the disgraceful amount of $500.00 for doing the executive work of the Board, and to pay the per diem and traveling expenses of the members who receive $4.00 per day for duty done away from home, and no doubt every member of the Board actually loses money by his absence from his professional work. As a result no money is left for the promotion of the public health after these expenses are paid, and consequently the Board has from necessity degenerated from a life-preserving organization to one simply for the regulation of the qualification of those applying for license to practice medicine in the state. The fees paid by these applicants, we are informed, has in some years actually made the Board self-sustaining if not a profit to the state. This is certainly a shameful condition in a state as rich as is West Virginia, and we sincerely hope that the very "progressive" Legislature of 1913 will honor itself and the state by making an appropriation that will put the State Board in a condition to do something for the betterment of the people by removing bad hygienic conditions, by educating the people in the care of their health, and by the active control of epidemic diseases, should any occur is our midst.

In addition to this there are certain changes in our health laws that are imperatively needed. These will no doubt be presented to the Legislature. The definition of "the practice of medicine" should be more clearly set forth, as it is in other states, so that our Courts will have no difficulty in making their decisions, and that traveling mountebanks, or localized mountebanks, for that matter, can no longer impose upon a too gullible people by their false pretenses and claims of possessing some mysterious power over disease. We can not here enlarge os this topic. The demands of the time is for legislation that

will protect the people from imposture and deceit, for power in the Board of Health that will make it an effective influence in the promotion of public health, and therefore in the advancement of the material interests of the people. Let the members of the Legislature come up to the help of the people whose servants they are. We believe they will do this. S. L. J.

A joint meeting of committees from the State Board of Health and the State Medical Association was held at Clarksburg on Monday, December 30th, 1912, for the purpose of forming legislation in the interests of public health, to be presented at the coming session of the state legislature. Those composing the commitee were Drs. Halterman, Golden, Barbee and Wingerter, of the State Board, and Drs. Henry, Hupp, Simpson and Johnson, of the State Association.

Drs. Robins and McMillen, of Charleston, were added to the committee at the Clarksburg meeting. The Joint Committee completed a permanent organization by electing as chairman, Dr. Hupp, with Dr. Simpson as secretary. The entire day was spent in fixing the general scope and in preparing the details of the measure to be urged, and the following sub-committees were formed to aid in the passage of the bill: Committee on Publicity, Drs. Golden, Henry and Wingerter; Committee on Finance, Drs. Halterman, Johnson and Simpson; Committee on Legislative Action, Drs. Robins, McMillen and Barbee.

The three committees named above are already actively at work, and hope for the hearty co-operation of the entire profession of the state in urging that more means be devoted to the advancement of the public health than has heretofore been available. At present West Virginia, with a much larger population than Wyoming, is contending with that state for the doubtful honor of being last on the list of states in the union, judged by the amount appropriated to the State Board of Health for public health purposes. While other states appropriate sums ranging from thirty thousand dollars up to a million and three-quarters, West Virginia, like Wyoming, limits the amount to a paltry fifteen hundred, which amount is barely enough to pay the actual traveling expenses of the state's medical examining board. C. A. W.

WOULD IT WHERE SO IN OUR REPUBLIC.

In Argentina no proprietary medicine, either foreign or domestic can be sold without the authority of the National Depart of Health and manufacturers must comply with the following rules:

1. Request for analysis must first be made to the Department. This request must be accompanied by a complete formula, quantitative and qualitative. 2. The request must be accompanied by five samples for analysis in the form in which it is to be put on market. 3. Costs of analysis must be paid in advance as well as an additional tax. 4. None may be sold if exact composition is not printed on the label. The word "cure" must not be used and the manufacturer must not say it is a panacea for too large a number of diseases.

G. D. L.

State News

All honor to these members of the Eastern Panhandle Medical Society, who are the first in with their dues for 1913: C. L. Skinner, F. M. Phillips, H. P. Hirst, T. K. Oates, Howard Osburn, W. B. Perry, J. M. Miller. Now is the time to pay our bills. Why not introduce the very good custom of paying our medical dues as well? Two malpractice suits are now pending against two of our members. Both are in good standing and will receive the aid of our defense fund if the cases come to trial. This must be quite a comfort. Let all pay up at once and we will then know where we stand for the year. The dues of every member should be paid in January.

* * *

The Grant-H.-H.-Mineral Society will hold its next meeting in Keyser on January 16th. A full membership is reported. Several additions have been made during this year. A suit was entered in Maryland against Dr. Hugh Strachan, a member of this society. It is reported that there is nothing in the case. So may it prove.

* * *

The death of Dr. J. S. Burdette of Kanawha county is reported. He was one of the oldest resident doctors of Charleston, and had been a victim of locomotor ataxia for many years.

* * *

Drs. Atlee Mairs and J. W. Moore, who have recently attended the American Surgical Congress in New York, are again at home and at work.

Dr. W. A. McMillen of Charleston has recently suffered and acute attack of tonsillitis.

* * *

Dr .W. B. Robertson, late of Dorfee, has located at Quincy, Kanawha county.

* * *

Dr. I. M. Mendeloff of Baltimore has opened an office in Charleston.

* * *

Dr. H. E. Harmon of Baltimore has recently paid a visit to Dr. McMillen.

* * *

Dr. Clarence McConihay, for the past several years resident physician of the municipal hospitals of Philadelphia, has located at Wimfrede Junction.

* * *

The local Medical Society is taking an active interest in the milk supply of Parkersburg, and consulting with the city authorities with regard to this very important matter. The members of the society are in a position to aid materially in the securing of a pure milk supply, and as elsewhere the physicians are always willing to aid in the destruction of their own business. The general health laws of Parkersburg are said to be in urgent need of revision. A local newspaper says:

"As it now stands the entire living generation could pass away and so far as public records are concerned there would be nothing left to tell the tale. Every death, every accident to a human being and every case of illness, contagious or not, coming to the attention of a physician should be reported to the health office, and accurate records kept of them. Parkersburg's control of contagion must necessarily be lax because there is no satisfactory reporting of infectious cases when they occur. We even do not know what the death-rate is in Parkersburg, and we never shall know until we compile the statistics. Without the gathering of official information of this sort health work necessarily must be more or less in the dark.

"The medical society within itself can secure an improved system for Parkersburg, and the oath of their profession bids them to do all they can to bring it about."

* * *

Dr. C. W. Umberger of Nicholas county has located at Roderick, W. Va., and Dr. McCutcheon of Nicholas county has located at Blakeley.

* * *

Dr. S. C. Austin, late of Madison, has removed to Peytona.

* * *

Dr. Thomas R. Evans, long ago a member of the Association, and late of Huntington, has accepted a position as Assistant Physician in Dr. Broughton's Sanitarium, Rockford, Ill.

* * *

Dr. Geo. W. W. Daniels of Girardstown, Berkeley county, graduated from the Cincinnati College of Medicine and Surgery, 1871, died September 2nd.

* * *

A number of cases of smallpox have occurred near Martinsburg and in Maryland. The cases are reported to be under good control, and no spread of the disease is feared.

Dr. A. L. Peters has removed from Grant Town to Fairmont.

* * *

Dr. J. W. Lyons, who has been engaged in practice in Huntington, has removed to Holden, W. Va., where he takes charge of an eighteen bed hospital for the Island Creek Coal Company.

* * *

Dr. A. U. Tieche, who came to Huntington to take the place of resident physician at the C. & O. Hospital, has gone to Welch to take a place in the coal fields.

* * *

Dr. G. R. White of Williamson has located in Huntington to practice his profession.

* * *

Dr. James I. Miller of Kenova, a member of Cabell County Medical Society, is a candidate for Mayor of Kenova.

* * *

MARRIED.—Dr. Harry Glenville Tonkin of Martinsburg to Miss Lillian Licklider at Martinsburg on November 28th.

* * *

BORN.—To Dr. and Mrs. C. B. Preston of Burnwell, a daughter. To Dr. and Mrs. W. S. Robertson of Charleston, a daughter.

* * *

DIED.—Dr. A. A. Farley, a well known physician of East Huntington, died suddenly early Christmas morning of heart failure, the end coming very unexpectedly at his home on Eighth avenue near Twentieth street. Dr. Farley had been ill for several days with heart trouble, but his condition was not considered so critical. He had been living in Huntington about two years and was held in the highest regard by all who knew him. He has two brothers, who are physicians in Logan county, and is survived by his wife and one daughter.

Society Proceedings

CABELL COUNTY SOCIETY.

HUNTINGTON, W. VA., Dec. 14, 1912.

Editor W. Va. Medical Journal:

The regular monthly meeting of this society was held in the Hotel Frederick, Thursday evening, Dec. 12th, at 8:30 p. m. The result of the annual election of officers is as follows:

President—Dr. W. E. Neal, Huntington.

Vice-President—Dr. H. C. Solter, Huntington.

Treasurer—Dr. I. R. LeSage, Huntington (reelected).

Secretary—Dr. J. R. Bloss, Huntington (reelected.

Censor—Dr. C. C. Hogg, Huntington.

Clinical case reports were made by Drs. Le Sage, Kessler, Taylor, Watts, Cummings, I. C. Hicks, J. A. Guthrie, and Fitch.

A committee consisting of Drs. C. T. Taylor, chairman, A. K. Kessler and H. C. Solter was appointed by the president, to report at the next meeting on the feasibility of incorporating the society.

A rising vote of thanks was tendered to Dr. Fitch for his interest in the society's welfare and his fairness as our presiding officer during the past two years.

After the completion of the evening's work lunch was served in the cafe.

Fraternally yours,
JAS. R. BLOSS, *Sec'y.*

EASTERN PANHANDLE SOCIETY.

Editor W. Va. Medical Journal:

A regular meeting of the Eastern Panhandle Medical Society was held at Charles Town, W. Va., Dec. 4, 1912, at 12 o'clock.

PROGRAM.

Dr. James F. Mitchell--------Washington, D. C.
Local Anaesthesia, with special referance to its use in the radical cure of hernia.
Dr. Wm. Neill----------Charles Town, W. Va.
Gastric Ulcer.
Report of Secretary and Treasurer, 1912.
Election of Officers.
Luncheon.

The attendance was good and we had an excellent meeting. The following officers were elected:

President—Dr. T. K. Oates, Martinsburg, W. Va.

Vice-President—Dr. Nelson Osburn, Martinsburg, W. Va.

Secretary and Treasurer—A. Bruce Eagle, Martinsburg, W. Va.

Dr. C. J. Nawrath, Berkeley Springs, W. Va., was elected a member of this society.

The next meeting will be at Martinsburg March 5, 1913.

Very respectfully,
A. BRUCE EAGLE, *Sec'y.*

FAYETTE COUNTY SOCIETY.

The December meeting of the society was held at the Sheltering Arms Hospital by invitation of Dr. Hunter, the Superintendent.

The society had as guests Dr. Murphy of Cincinnati and Dr. Keller of Ironton, Ohio. At the regular meeting in the forenoon, Dr. Murphy presented his paper on The Nose and Its Accessory Cavities, the same being demonstrated by excellent specimens. Dr. Keller's paper entitled Gonorrheal Infections of Female was filled with interesting material gained from his long years of observation. His biblical knowledge of the subject was well received, and his former colleagues were surprised at his rapid strides in theology.

In the afternoon Drs. Keller and Murphy conducted a clinic in their respective specialties. Dr. Hunter provided abundant material, and the technique displayed by them bespeaks much for these men who are masters of their subjects.

A vote of thanks was extended to Dr. Hunter for his invitation, and also extended to the hospital staff.

Officers elected for the new year are:

Dr. T. H. Elliot, Gauley Bridge, President.
Dr. B. W. Eakin, Carlisle, Vice-President.
Dr. C. W. Lemon, Claremont, Vice-President.
Dr. H. C. Skaggs, Kay Moor, Sec'y-Treasurer.

H. C. SKAGGS, *Sec'y.*

HARRISON COUNTY SOCIETY.

CLARKSBURG, W. VA., Dec. 30, 1912.

Editor W. Va. Medical Journal:

Below you will find copy of resolutions relative to the life and death of Dr. Emory Strickler of Shinnston, W. Va.

The resolutions were offered by Dr. T. M. Hood at the annual meeting of our medical society. It was ordered that the resolutions be spread upon the minutes of the society, a copy sent to the family and a copy to the State Journal. In accordance with the order I send you the original as offered by Dr. Hood.

IN MEMORIAM.

Since our society last met Dr. Emory Strickler, Sr., of Shinnston, passed away. Dr. Strickler was formerly a member of this society, and but for the feebleness of age he would no doubt continued to attend our meetings. Dr. Strickler was born in Fayette county, Pennsylvania, in 1828. He came to Harrison county, Va., in 1854, taught school for a time and was appointed the first superintendent of free schools of Harrison county. While a teacher he began the study of medicine, and took a course at the Eclectic School of Medicine in Cincinnati in the early sixties. After engaging in the active practice of his profession for forty-five years, he died October 25, 1912, aged 84 years. He leaves one son, Dr. Emory Strickler of Fairmont, W. Va., and one daughter, Mrs. C. L. Watkins, of Shinnston, W. Va.

To the members of the profession most intimately associated with the deceased, his life and work appeal most tenderly. His strong and vigorous body, with perfect health for so many years, fairly radiated good cheer alike to the sick and well. He never seemed to be practicing medicine for commercial reasons. He was always kind and patient with the younger men in the profession. He was always willing to take part with his fellow physicians or fellow citizens in any movement for the public good. May the spirit of his life win more of us, in this day of so many opportunities, to a better understanding of our duties as physicians.

Very respectfully, LINN OSBURN, *Sec'y.*

MARION COUNTY SOCIETY.

FAIRMONT, W. VA., Dec. 28, 1912.

Editor W. Va. Medical Journal:

The Marion County Medical Society held its annual meeting Friday evening, Dec. 27th, in the the assembly room of the society. The following officers for the ensuing year were elected:

President, Dr. C. W. Waddell; Vice-President, Dr. C. M. Ramage; Secretary, Dr. H. R. Johnson; Treasurer, Dr. W. H. Sands. Board of Censor, Dr. L. N. Yost; Delegates to the W. Va. Medical Association, Dr. C. O. Henry and Dr. C. L. Holland.

Our society is taking on new life. We admitted five new members and received two more applications for membership at this meting.

We have just secured commodious quarters and expect to begin the formation of a medical library, which is to be the property of, and controlled by, the medical society. Dr. E. W. Strickler, an active member of the Preston County Society, is enlisted as one of our accessions.

With best wishes for a happy and prosperous new year, I am Fraternally,

H. R. JOHNSON,
Sec'y Marion County Med. So.

M'DOWELL COUNTY SOCIETY.

MARYTOWN, W. VA., Dec. 12, 1912.

Editor W. Va. Medical Journal:

On Wednesday evening, Dec. 11, 1912, the Medical Society of McDowell county held their annual business meeting, which was followed by a "smoker" to which followers of Aesculapius from Cabell, Mingo, and Mercer counties were invited. At the meeting the following officers were elected for the ensuing year:

President—J. Howard Anderson, M.D., Marytown.

1st V.-P.—W. E. Cook, M.D., Algoma.

2d V.-P.—C. F. Hicks, M.D., Sup't of Miners' Hospital No. 1.

Sec'y—S. D. Hatfield, M.D., Iager.

Treas.—W. L. Johnston, M.D., McDowell.

Censor—E. F. Peters, M.D., Maybeury.

Delegates (elected last year)—H. D. Hatfield, Eckman; C. F. Hicks. Welch.

At the same meeting applications for membership were received and the enclosed resolutions were adopted in recognition of the fact that one of its members, Hon, H. D. Hatfield, M.D., has been elected to the Governorship of our commonwealth.

We enclose the latter asking that they be given a place in our Journal.

At the annual business meeting of the Medical Society of McDowell county, West Virginia, held at Welch, West Virginia, on December 11th, 1912, the following resolutions were presented by the committee, read before the society, and ordered spread upon the minutes:

WHEREAS, The citizenship of the commonwealth of West Virginia saw fit, upon the 5th day of last November, to elect for the first time in the history of the state, a member of the medical profession to the highest seat of honor within her province;

WHEREAS, Dr. H. D. Hatfield, the physician and surgeon chosen for this peculiar honor, is a member of the Medical Society of McDowell count, therefore be it

RESOLVED, That we, the Medical Society of McDowell county, express our deep appreciation of the confidence thus placed in one of our number;

RESOLVED, That we congratulate our worthy colleague, thus signally honored, upon the distinction conferred upon him, and upon the reflected glory he has thus brought upon his home society and the medical profession at large;

RESOLVED, That we, individually and collectively, pledge to him and to the citizenship who thus honored him, our best wishes and hearty suport during his administration, and especially in matters pertaining to state-wide hygiene and sanitation;

RESOLVED, That a copy of these resolutions be sent to Dr. Hatfield, to the *West Virginia Medical Journal*, and to the Journal of the American Medical Association.

CHAS. F. HICKS,
J. HOWARD ANDERSON
Committee.

Wishing success to you and to the State Organization, I remain Very respectfully,

J. HOWARD ANDERSON, *Sec'y.*

OHIO COUNTY SOCIETY.

November 18. Society met with President Schwinn in the chair. 30 present. Dr. Weinberger read a paper on "The Toxemias of Pregnancy." (To be published later). The paper was freely discussed by a number of members.

Dr. Hall reported a case of death due to an ulcer of the intestine with perforation, in a patient with reducible hernia. Attributed the ulcer to the pressure of the truss. At autopsy the peritoneal cavity contained a large amount of fecal matter.

Dr. Drinkard reported a case of breech presentation with prolapse of the cord. and resulting death of the child. Post pertum hemorrhage resulted, from which the patient recovered. After a free discussion the society adjourned.

November 25th—The society met with President Schwinn in the chair. 30 present. Dr. Ackerman presented a case of birth palsy of arm. This was due to a luxation. Treatment consists in replacing the head of the humerus in the glenoid fossa and bandaging. Dr. Fulton read a paper on "Prolapse of the Kidney." Said a displaced kidney was not necessarily a floating kidney. He gave the different methods of examining for a movable kidney, and said it occurs in 20% of women and 2% of men, the right being most frequently affected. Two classes, one of which gives no symptoms. The other causes digestive and nervous disturbances. Spoke of diagnosis between this and gall bladder disease, impaction of colon, floating spleen. The treatment palliative and surgical. The former consists in the use of abdominal supporter, rest, free feeding, and necessary constitutional treatment. Kidney pads not believed in. Operation not always followed by success, as the prolapse often recurs.

Paper discussed by Drs. Glass, Hupp and the author.

Dr. Burns reported a case of intermittent hydronephrosis relieved by Edebohl's operation; and Dr. Quimby showed the x-ray plates of the case. One plate showed the collargol catheter in the ureter, and the other the ureter and pelvis of the kidney injected with collargol. The kink in the ureter was admirably shown. Dr. Ackerman reported a case of acquired hydronephrosis due to the tying of the ureter in a hysterotomy operation.

Drs. Elizabeth Keay and A. R. Weinberger were elected to membership. Adjourned.

DR. BURNS, *Sec'y.*

Reviews

DISEASES OF CHILDREN. — A Practical Treatise on Diagnosis and Treatment, for the use of students and practitioners of medicine. By BENJAMIN KNOX RACHFORD, M.D., Professor of Diseases of Children, Department of Medicine of the University of Cincinnati, Pediatrician to the Cincinnati and Jewish Hospitals, etc. D. Appleton & Co., Publishers, 1912.

This, the first edition of Prof. Rachford's book, contains 783 pages, 107 illustrations in the text and six plates.

In scope the work does not differ from the

older text-books on children. The chapters dealing with the hygiene, growth, examinations and general therapeutics of children are practical and sufficiently explicit for the purposes of the general practitioner. Vaccine therapy is given as much space as the present results from its employment warrant.

The subject of infant feeding is not treated in great detail, but all the essentials are given. The tendency to the indiscriminate and empirical use of the proprietary infant foods by physicians might be lessened by giving more completely their composition and food value, and how the same results may be obtained by using non-proprietary articles. Due mention is made by the author of the recent additions to our knowledge of the relative value of the proteids, fats and carbohydrates in nutrition.

In presenting the individual diseases special attention is given to diagnosis and treatment, and tables for differential diagnosis are used freely.

In general the text is clear and concise and the diction good. The illustrations are fair. The Moro and von Pirquet tuberculin skin reactions are well shown in colored plates. Several good radiographs by Dr. Sidney Lange are found in the text. The index is unusually complete and accurate. The paper is too highly glazed, and physicians who do much of their reading by night should demand unglazed paper in their books and journals.—H. K. S.

TEXT-BOOK ON THE PATHOGENIC BACTERIA AND PROTOZOA.—Seventh Edition. Thoroughly Revised. A Text-Book upon the Pathogenic Bacteria and Protozoa. For students of medicine and physicians. By JOSEPH MCFARLAND, M.D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia. Seventh edition, thoroughly revised. Octavo of 878 pages, 293 illustrations, a number of them in colors. Philadelphia and London: W. B. Saunders Company, 1912 Cloth, $3.50 net.

This splendid and thoroughly up-to-date book is not only especially valuable to the student and general practitioner, but should be in the library of every man doing laboratory work. It not only contains the latest word on bacteriological technique in a concise form, but it has a number of very excellent plates and illustrations. The chapter on Immunity, and on the different blood reactions are particularly well written. In the second part the infectious diseases and the specific micro-organisms are dealt with in a thoroughly scientific manner. In short, this is about the most complete work on this subject that has come under our observation for some time.—J. E. B.

A MEDICAL HISTORY OF THE STATE OF INDIANA.—By G. W. H. KEMPER, M.D., Am. Med. Asso. Press, Chicago, 1911.

This is a collection of the articles published in the Journal of the Indiana State Medical Association in 1909 and 1910. These articles are here revised and corrected, and new historical matter added. Deceased physicians are givenl full biographical sketches. The living are mentioned in connection with other historical matter. The book includes an introductory chapter by Dr. A. W. Brayton of Indianapolis, who contributes a biography of Dr. Kemper. The book is of value to any physician interested in the history of medicine. The account of surgical operations and the history of epidemics will be of value to future students of medical history. The author's address is Muncie, Ind., from whom the book can be had.—G. D. L.

DISEASES OF THE STOMACH, INTESTINES AND PANCREAS.—By ROBERT COLEMAN KEMP, M.D., Professor of Gastrointestinal Diseases, New York School of Clinical Medicine. Second edition, regised and enlarged. Octavo of 1021 pages, with 388 illustrations. Philadelphia and London: W. B Saunders Company, 1912. Cloth, $6.50 net; Half Morocco, $8.00 net.

This is the second edition of a work that had in its first edition unusual popularity. Few books have received such favorable commendation from reviewers. The appearance of a second edition within two years, several reprintings having been found necessary in the mean time, indicates the wide popularity of the work. The volume contains over a thousand pages, and is profusely illustrated, photography having been employed in the demonstration of diagnostic methods and in treatment. Much additional matter has been added and several new subjects introduced. Diseases of the pancreas have received very full consideration, with much new light gathered from the surgery of recent years. The colon baeillus infection is fully discussed, and a revised section on the duodenal ulcer appears. The author has apparently written for the general practitioner, and hence writes with minuteness in discussing diagnosis, as well as when treating of physical or chemical investigation.

We are quite sure that our readers will make no mistake in the purchase of this book, no doubt the best before the American profession on the topics treated.—S. L. J.

Medical Outlook

PROLONGED PREGNANCY.—A. H. WRIGHT, Toronto, (*Interstate Medical Journal*, October,), reports the recommendations published in the *American Journal of Obstetrics*, two years ago, to induce all labor at term as a matter of routine. He says that if this is done in an aseptic way it is practically devoid of danger, that the gravest danger is really the growth of the child *in utero*, and that in any case the induction of labor involves much less danger than a labor when pregnancy has been prolonged to ten months. Since the Schauta method of vaginal tamponade is not effectual in a large proportion of cases, the author advises in the majority of cases that a tube or bougie be introduced into the uterine cavity as the first step. The parts should be prepared as for vaginal hysterectomy, and with the patient in the lithotomy position a weight speculum is introduced and the cervix fixed with a tenteulum forceps. A sterilized gum elastic baugie (No. 12E) is then intro-

duced gently within the uterus up to the fundus if possible, care being taken not to rupture the membranes. The patient is now turned from the back to Sims' position and after the introduction of a Sims speculum the vagina is tightly packed over or around the small portion of the bougie projecting into the vagina. The lower third of the vagina should not be packed. If the introduction of the bougie or tampon produces pain, as it frequently does, an anesthetic—preferably ether,—is administered. Wright believes that protracted pregnancy occurs in 15 per cent. of all cases and that protraction to the extent of four weeks occurs in about 6 per cent. of the cases where there is no interference. (We print the above as a sample of surgical obstetrics run mad.—EDITOR.)

CAMPHOR IN PNEUMONIA.

Experimental work on this subject, as well as clinical trials, were carried out by the author. In 20 rabbits inoculated with a fatal dose of pneumonia, death was retarded from two to five days by champhol-oil injections in 8 and entirely prevented in 9. Among 37 cases of pneumonia in human beings, treated with camphor by the author's method, there was but one death. The following conclusions were reached. (1) That 10 c.c. of a 30 per cent. camphorated oil (sesame oil), equal to 36 grains of pure camphor, injected hypodermically to each 100 pounds of body weight every eight to twelve hours, do not produce symptoms of poisoning, in fact are harmless; (2) that proportionally much larger doses are equally well borne in rabbits; (3) that the quantities of camphor mentioned materially assist in overcoming pneumococcic toxemia, and (4) that the earlier the treatment is resorted to the better the results.

The injections are best given on the outer aspect of the thigh. A Luer syringe of 10 or 20 c.c. capacity, without rubber washer, is used. The oil must be sterilized in a large-mouthed bottle with loosely fitting stopper in a boiling water bath, and drawn from the receptacle—not poured—into the sterilized syringe. The point of injection is best disinfected with a few drops of iodine tincture. During the injection the skin, with the subcutaneous fat, must be well drawn up, so that the oil is deposited underneath it. In fat patients the requisite amount may be injected in two localities. In lean persons 20 c.c. can be injected in one place without discomfort. Abscesses are due to imperfect sterilization, and sloughing of the skin to faulty technique.—A. Seibert (*Medical Record*, April 20, 1912).

SOAPS AND THEIR EFFECTS ON THE SKIN: AN ANALYTICAL RESEARCH.

GARDINER in the *Edinburgh Medical Journal* for June, 1912, contributes a paper on this topis. A summary of conclusions is as follows:

1. All soaps, from their chemical constitution, must be irritant to the normal skin.

2. The effect varies with the individual skin, and is more pronounced in senile and diseased skins.

3. Cottonseed oil and rancid fats are probably largely responsible for the irritant effects in cheaper soaps. They are much more commonly used now than in former years. Gardiner is of the opinion that the first mentioned is, uncombined, a skin irritant, but this is a matter for further inquiry.

4. The bactericidal power of soaps is *nil*, and even when combined with antiseptics they are of no value as germicides.

5. There may be some reason for the introduction of such substances as sulphur and ichthyol into soaps because of their effects on the glands and blood-vessels of the skin, but clinically, antiseptics, and above all carbolic acid, increase irritation.

6. There is no scientific basis for the addition of extra fat to soaps, as when soap is mixed with water the alkali freed will at once unite with the superfluous fat.

7. Rosin and impurities have no significance from the present standpoint, but paraffin and benzene derivatives, when incorporated with soaps for cleansing purposes, increase the harmful effect on the skin.

8. The minimum of soap should be employed, and well washed off.—*Therapeutic Gazette.*

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McCoy, O. D.....Wheeling
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McDonald, J. W.....Fairmont
McDonald, R. H.....Newlonton
McElfresh, Edw.Pt. Pleasant
McElwain, W. L.....Denmar
McFerren, S. A.Falling Spring
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McGovern, A. M.....West Union
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McLain, W. H.....Wheeling
McLain, W. L.....West Union
McMillan, W. A.....Charleston
McMillen, R. M.....Wheeling
McNeer, L. C.....Dante, Va.
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McSherry, J. W.....Martinsburg
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NOTE.—The names only of the members who have paid dues for 1912 are here printed. More than fifty others are on the rolls of the local societies, and have received the JOURNAL regularly. We suggest that these pay their dues at once, that we may not lose by their neglect. If any errors are discovered as to dues, write to the secretary. If any errors in names or address, write to the editor.

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Original Articles

THE ETIOLOGY AND PROGNOSIS OF INSANITY.

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(Read at annual meeting State Medical Ass'n, July, 1912.)

There are so many obvious reasons why the medical attendant should answer the inquiries concerning the cause of a patient's insanity and as to the probability of recovery, that it has seemed an opportune time to call attention to the etiology and prognosis of mental diseases.

"On studying closely the etiology of mental diseases one soon recognizes the fact that in the great majority of cases the disease is produced—not by a particular or specific cause, but by a series of unfavorable conditions which first prepare the soil and then by their simultaneous action, determine the outbreak of insanity." (1). We thus see that while for descriptive purposes we may speak of the predisposing and exciting causes of alienations, still it is very difficult to say just at what point a given etiological factor ceases to be a predisposing and may be regarded as an exciting cause. In discussing the etiology we must keep this fact in mind.

It is necessary for the development of mental disease that the mind shall be below normal in resistance. This predisposition may be "latent or apparent, congenital or acquired, general or individual." (2)

The data concerning the predisposing influences of race, climate, social position and civil condition are so inconclusive that we may pass over them. So far as the sex of the patients is concerned we find that they are about equally divided, for pregnancy, lactation and the menopause in the female are offset by the struggle for existence, drunkenness, greater exposure to injuries, et cetera, of the male, and both are equally susceptible to the effects of heredity and strain.

A person may develop insanity at any age, though it is not frequent in children. There are, however, certain periods in the life of an individual when exciting causes seem to be more powerful in precipitating a mental break-down; the age of puberty, the menopause and the period of senile involution are epochs when the physiological changes taking place render the organism particularly vulnerable.

Some occupations have a predisposing influence because of conditions connected with them which depress the vitality of the organism by loss of sleep, exposure to extremes of temperature, exposure to various poisons (metallic and otherwise) with which the individual must come in contact. For some time I have been impressed by the large per cent of farmers among the admissions to the West Virginia Asylum; for the past four years of the number of male patients admitted this occupation has furnished something over 17 per cent of the total, and the seasons of poor crops are followed by an increased number of admissions from this occupation.

Finally we have the predisposing influence of heredity, which is by far the most important cause of insanity. Three years

ago I told you that in from 50% to 75% of the insane, heredity was an important etiological factor. I have had no reason to change my views upon this point and three years' additional observation has only strengthened it. You must understand, of course, that I refer to an inherited instability of the nervous system and not a particular neurosis or psychosis; such hereditary equivalents as epilepsy, hysteria, eccentricities, et cetera, among the ascendants and collaterals must be borne in mind and searched for in determining the influence of heredity in a given case.

The first biennial report of the State Board of Control of West Virginia shows that of 1082 admissions to the three hospitals for the insane during the period covered by the report, heredity was denied in 447; admitted in 295; unknown in 340. Omitting the 340 unknown cases we find that 38.4% of the remainder gave a history of insanity. Many of these histories are not correct as sent to the authorities of the institutions. To begin with—frequently the examining physician has never seen the patient prior to his examination at the lunacy trial and so is not in position to say as to the influence of heredity as an etiological factor, but puts "no" in the space for answering it; then again the family will deny insanity and since the physician is not familiar with their family history he again answers "no;" further, the way the question is asked in the blank for the physician's statement does not indicate that a search for hereditary equivalents should be made and as a consequence we only get a history showing heredity in case of grave mental ills, and so it goes.

Our idea of heredity must get beyond a search for insanity in the parents, for there are "essentially three facts to consider:

'A'—Atavism—The physical and mental organization and peculiarities may be transmitted from the first generation to the third without making their appearance in the intervening generation; thus the life and health history of the grandparents is of interest.

'B'—Only in rare instances is the actual disease transmitted by heredity (congenital insanity, hereditary syphilis); as a rule, it is only the disposition to it that is transmitted. Under such circumstances actual disease occurs only when accessory injurious influences make themselves felt.

Thus we must investigate the health history of the blood relations (uncles, aunts, cousins); and, since here the law of atavism is also operative, any diseases that have affected great-uncles or great-aunts should be considered.

'C'—It is only exceptionally that one and the same disease in progenitors and descendants develops as a result of hereditary transmission of abnormal disposition. On the contrary, there is a remarkable changeableness of the disease pictures that has almost the significance of a law (polymorphism or transmutation).

The transmutations are innumerable. The most various neuroses and psychoses appear in families affected with heredity, side by side and one after another, through generations; and they teach us that from a biologico-etiologic standpoint they are branches of but one and the same pathologic tree. (3)

Before leaving the subject of heredity I must touch upon drunkenness. According to Darwin the families of drinkers die out in the fourth generation.

The degeneration being traced as follows:

"1st Generation: Moral depravity; alcoholic excesses.

"2nd Generation: Drunkenness; maniacal attacks; general paralysis.

"3rd Generation: Hypochondria; melancholia; toedium vitae; murder.

"4th Generation: Imbecility; idiocy; extinction of the family." (4)

Even the children of temperate parents when begotten at the time of intoxication, are in a high degree disposed to insanity and nervous diseases in general.

After heredity the next most important predisposing factor in causation of insanity is a condition of the nervous system which has been called "neuropathic'. This may be congenital or acquired and "is the functional expression of beginning degeneration of the most highly organized nervous elements." (3) While the congenital type may spring from an hereditary foundation, it may, however, result where the parents are not in any way affected by heredity, being due to such influences as disease, intoxication and so on, which diminish the

eubiogenic energy of the parents. Furthermore, this neuropathic constitution may be acquired as a result of debilitating and exhausting diseases, sexual excesses, et cetera.

From what has been said it is seen that most cases of insanity develop in individuals who are predisposed in some way. It must not be thought, however, that all who are predisposed will of necessity become insane. In the great majority of instances mental disturbances occur in persons normal in their mental faculties, or at least free from grave manifestations of alienation, so we are compelled to consider the accessory or exciting causes of mental breakdown.

It is of great importance to us that we search carefully into the history of patients with mental ills, for while we can only treat predisposing etiological factors in an indirect and general way, we can, however, directly combat or remove the exciting causes and upon our ability to successfully accomplish this depends to a very great extent the outcome of the case.

There is no question that the emotions may in some instances produce insanity, and more frequently than we formerly thought. There are cases where some violent emotion, most frequently fright, is followed immediately by insanity. More frequently and as a rule the psychosis develops after a longer or shorter period during which the patient seems to have retained his normal mental status. At the time this is written there is, in my service at the asylum, a young lady who some 18 months ago had quite a shock during some trouble in the neighborhood in which she lived. For a week or ten days after she seemed to be all right; then it was that there was talk of taking a number of depositions. She began to worry over the matter; became very nervous and had insomnia; her appetite began to fail and digestion was upset; finally she refused all nourishment and became wildly excited. For a number of months after she came to us it was necessary to feed her with a stomach tube. Now she eats when taken to the table; gives but slight attention to the calls of nature; does not talk and pays no attention to what goes on about her.

The psychic factor by undermining the constitution in this way brings about the mental breakdown. When there is a predisposition it is more readily produced, and even if there is no predisposition an outbreak is more frequently brought about by some chronic emotional strain, e. g., household cares, than by an acute one. My experience corresponds with that of other workers in this field in that it is almost without exception the depressive emotions (fright, death of loved ones, loss of honor, et cetera), which bring about insanity.

I must not neglect to mention the influence of imitation, or the so-called psychic infection of reciprocal insanity (*Folie a Deux, Delire a Deux*). In this case an insane individual will communicate his delusions to some member of his family or a friend, who accepts them unquestioned and may even find proof for them in his own hallucinations; this latter individual is always congenitally feeble-minded.

We can see the influence of this "psychic infection" in the epidemics of suicides, crime and so on, which at times will follow the death of one individual by some particular means and which is given publicity in the newspapers. I was especially impressed by this some time ago, when in our section there were four or five suicides by the phenol route in a period of some ten days, following a case of somewhat sensational nature which was featured by the papers for a few days. In the writer's opinion it is a mistake to print matter relating to these occurrences and particularly the details, as is generally the case, interesting and valuable from a newspaper point of view though they may be. Such things are potent for harm to many individuals.

Among the exciting causes of mental disease we find that toxic influences are very prominent. When we think how the blood carries nutriment to each cell of the nervouse system and removes the waste products resulting from the cell activities, we are not surprised that derangements should follow the delivery of poisons, in one form or another, along with the nutriment necessary for the proper maintenance of cell activity.

Some poisons bring about mental disease by long continued chronic action, others by acute intoxication; while others still affect the nutrition of the central nervous system by causing arterial disease, et cetera. The absorption of toxic matter from the alimentary tract is a more frequent

cause of insanity than has been appreciated in the past. Among the drugs that are potent as causative factors in the development of insanity we may mention alcohol, morphine, cocain, cannabis indica, chloral, et cetera. Chief among them is alcohol and the report of the State Board of Control of West Virginia states that over 10% of the admissions to the three asylums for a period of two years, have this drug as the alleged cause of their mental ill. It is the long continued use of alcohol which brings about insanity, and not acute intoxication. Morphine is the alleged cause of the mental derangement in 2% of the admissions to the state institutions in West Virginia, while cocaine, chloral, et cetera, get the credit for causing something like 1%.

Certain bodily diseases may act in the capacity of etiological factors in mental diseases. Chief among them is syphilis. In this disease the mental manifestations are late in appearing and take the form of general paralysis and cerebral syphilis in the majority of instances: we must not overlook the importance of congenital syphilis in the etiology of idiocy and imbecility. In this state the statistics allege syphilis to be the cause of a fraction over 3% of the admissions.

The acute infectious diseases may give rise to psychoses; the most important ones in this respect are typhoid fever, pneumonia, influenza, acute articular rheumatism, and in some localities malaria. The only post-infection psychoses which have come under my personal observation have followed typhoid fever, pneumonia and influenza. As a general thing these patients show a certain stupidity and tend to a terminal dementia; several cases following influenza which have come under our care have recovered, however.

Chronic diseases, by disturbing nutrition, by developing toxins, by causing pain or worry, et cetera, may give rise to psychoses of various types. Among these diseases may be mentioned tuberculosis, carcinoma, nephritis, et cetera.

While diseases of the genitalia are sometimes attended by mental manifestations, in my opinion this is not the case nearly so frequently as many physicians seem to think. Some excellent results at times follow operative procedures upon the female pelvic organs, but more frequently the results from the alienist's point of view are disappointing. Certainly any condition needing surgical treatment in an insane person should receive attention, just as it should in one with no mental symptoms; the removal of the trouble may be followed by restoration to normal mental health, but not in every case, nor, in fact, in the majority of them.

As a result of my observation of several hundred persons afflicted with epilepsy, covering a period of nearly seven years, I will say that in my experience there is a gradual degeneration of the mental faculties in the majority of patients with this disease. "Hysteria is also a functional neurosis of the cortex, often closely associated with divers psychoses." (5)

Organic nervous diseases, such as meningitis, tumors, et cetera, may give rise to psychoses. In these cases there will be symptoms of the pre-existing organic affection which will demonstrate its etiological significance.

A fraction over 2% of the admissions to the institutions in West Virginia allege an injury to the head as the exciting cause of the existing insanity. In such cases there may be no evidence of a psychosis for hours or even days, when it will suddenly develop. Sometimes there will be no immediate development of the mental derangement, but the injury seems to produce an unstable condition of the central nervous system which renders it particularly vulnerable to etiologic factors later in life. It is possible that sun-stroke and heat-stroke (insolation) operate in a similar manner.

Stresses of various kinds, mental and physical, in conjunction with disturbances of nutrition may form a foundation upon which a psychosis develops. It is in this connection that the physiological changes taking place during puberty, pregnancy, the climacteric and senility have their greatest influence in determining the development of insanity.

The question of giving a prognosis in the case of a patient suffering with deranged mental functions, places a responsibility upon us that demands our most careful consideration. The demand for the prognosis may come from relatives or friends because of anxiety or a sympathetic interest; it may be asked by the authorities

in order to determine the course to be pursued as to the appointment of a committee; it may be necessary because of business associations or transactions.

In discussing the question of the prognosis in mental disease it is necessary to view it from several standpoints: To begin with, what is the prognosis as regards the life of the patient? It may be stated that in general mental disease tends to shorten life. This depends to some extent, however, upon the type of alienation, the age of the patient and the length of time the condition has existed. Complicating diseases, as pneumonia, influenza, bronchitis, enteritis, tuberculosis, et cetera, are markedly more frequent and far more serious in the insane than in persons with no mental disease. Dementia paralytica has a bad prognosis as to the duration of life; an agitated type of dementia in an elderly individual is of bad prognosis; the depressive types due to senile involution are unfavorable in their prognosis because of the refusal of food, danger of suicide, exposure and so on.

From the standpoint of cure the prognosis is especially difficult to give. In the past when a person became insane the laity and the majority of physicians regarded him as incurable. Experience teaches us that a large per cent of these patients are curable; this is particularly true if the condition is recognized early and treatment instituted promptly; the longer the duration of the condition, the less favorable is the hope of recovery. There are no absolute criteria to go by, however, for sometimes there is recovery after even a number of years of seeming hopelessness. The outlook is more favorable in those cases having a sudden outburst of insanity, than in the ones which develop gradually as a result of continuous injurious etiologic factors.

"In the prognosis as to cure it is of the greatest importance whether the psychosis depends upon an unfavorable accidental causal moment or whether it depend upon a taint of the whole constitution, of hereditary or other origin.

"If the hereditary factory is limited to a simple disposition, which before the outbreak of the disease did not manifest itself clinically by neurotic or psychic anomalies, in other words, if the brain be simply a locus minoris without other signs of disturbances of development or functional degeneration,—then the prognosis is really more favorable than in non-hereditary cases. In the cases under consideration accessory injurious influences, it is true, induce disease, but they are without profound injurious influence on the psychic organ, the functions of which are wanting in stability, and after the subsidence of the disturbance it easly regains its usual equilibrium. On the other hand, when accidental causes induce mental disturbance in a burdened individual, the effect is much more profound, and therefore much more difficult to overcome.

"It is quite a different matter in cases in which the hereditary factor is revealed in original defect of character, eccentricities, and disproportionate development of psychic energies, and especially by symptoms due to a taint in which the disease forms the last link in a chain of psychopathic anomalies and symptoms of development. The prognosis in such cases is bad, and in congenital mental disease (original paranoia, moral insanity) is actually hopeless. If the taint manifest itself in a state of congenital mental weakness, and, if a psychosis develop in such an imbecile, then the prognosis with reference to the restoration of the status quo ante is much more unfavorable than in the case of normal individuals." (3)

Cases of insanity due to head injuries, insolation, meningitis, et cetera, are unfavorable as to cure. In cerebral syphilis and chronic alcoholic insanity the outlook is more favorable, but there is usually recovery with defect. The psychoses of childhood are unfavorable and are of additional alarm in that they endanger the future mental development. The psychoses of pregnancy, the puerperium and lactation are said to usually end in recovery; my experience has been just to the contrary and I hesitate to give a hopeful prognosis in such cases.

The most favorable cases as regards cure are those due to anemia, menstrual disturbances and curable affections of the digestive tract and genitals.

It is stated that something like one-fourth of the patients discharged from asylums have a recurrence. The admissions for two years to the hospitals in this state,

show a fraction over 16% as being recurrences. The etiology is of the greatest significance in giving a prognosis as to the danger of recurrence. For example a case due to anemia, or some other accidental cause, with no hereditary foundation, will in all probability not have a recurrence. Where there is a taint, however, and particularly if it is hereditary, there is great danger of a recurrence at a future period. It is of great importance to know how completely the discharged patient will be able to avoid etiological factors which brought about the psychosis. To discharge patients and have them go out in search of employment, with no assistance; to have them go back to the same depressing surroundings, struggle to make a living, household cares, et cetera, will be to court a recurrence and our prognosis must of necessity be unfavorable. I will say, in passing, that here is a great field for charitable organizations to establish departments for "the after care of the insane." In some states this need is being recognized and an extension of the plan will be of great benefit.

The prognosis as to the danger of hereditary transmission cannot be given in a general way; even in individual cases we are able to give merely a problematic opinion.

"The important point for the decision of the question lies, of course, in the pathogenesis of the psychosis, the hereditary influence of which is to be feared.

"If the psychosis be constitutional and present degenerate foundation and features, then there is great danger of transmission; if, on the other hand, it has been accidentally acquired without any predisposition and has been cured, and also if its symptoms have been benign and followed by recovery without defect, then there is no probability of hereditary influence upon descendants. This influence, however, is possible if conception takes place during the course of the psychosis.

"With reference to the possibility or probability of hereditary influence upon descendants in cases where there has been taint or mental disease in ancestors, the following should be considered: The worst case is where the father and mother are both tainted and mentally burdened before the conception of the descendants under consideration; and, too, if the mental disturbance itself presented a degenerate character. In such a case as this, mental disease in some form or other in the descendants is to be expected almost with certainty. However, the law of atavism might save the individual if earlier ancestors were healthy.

"If only the father or mother is tainted or diseased, then the question depends essentially upon which parent the individual physically resembles. * * *

Persons neurotic by heredity should abstain from procreation. Unfortunately, it is especially in such individuals that intensified sexual impulse is observed, and this is (to some extent, at least), responsible for the fact that the curse of insanity is increasing rather than diminishing, in spite of all scientific teaching." (3)

References: (1) GRIESINGER, (2) DE FURSAC, (3) KRAFT-EBING, (4) MOREL, (5) CHURCH and PETERSON.

ALCOHOL AND HEREDITY.

By C. C. Wholey, M.D.,
Pittsburgh, Pa.

(Read before the Section on Eugenics of the Pittsburgh Academy of Sciences and Arts.)

In discussing the question of alcohol in its relationship to heredity, it may be well at the outset to note the fact that people generally take a very definite and emphatic stand upon one side or the other of the question. One faction denies the possibility of any effect upon posterity; the other holds as firmly to the opposing opinion: that chronic alcoholism, as well as tuberculosis and other poison-producing diseases, inevitably leaves its impress upon the offspring in definite disease, or in weakened physical or nervous resistance. The first class—those deriding the notion of alcoholism playing a part in heredity—probably base their belief upon the fact that one encounters everywhere, in business and in social life, individuals of alcoholic ancestry, who are, nevertheless, apparently as sound and as efficient as any of their fellows. This faction has not been made aware, or forgets, that the laws governing heredity work slowly and obscurely; that effects may not appear in a demonstrable form in the first or in the second generation. Nor is there any way of knowing what the individual might have been with a different ancestry. On this side, too, stands a powerful com-

mercial interest and a strong social prejudice. A man does not usually wish to find evil in that which puts money into his pocket; or in what caters to his appetite and enables him, as a good fellow, to conform to the custom of the crowd.

The opposite side— those who are convinced that alcohol is a most important factor in determining inherited disease, or potentiality for it—embraces, in my opinion, the majority of medical and scientific men who have given their attention in a particular way to this subject. Upon these rests no easy task, namely, to put forth clear, definite, irrefutable facts, to prove their thesis. For the transmission of inherited traits is played upon by diverse and far-reaching influences; the infusion of fresh blood through marriage; the creation of new tendencies and potentialities through environment and education. And in this direction nature works out her laws with infinite slowness. Only after careful observation upon many succeeding generations would it be possible to say, that such and such a fact is always, everywhere, true. As yet we have worked out but few definite laws which govern heredity.

For the most part in this discussion I shall maintain a neutral attitude, endeavoring merely to set forth the recent opinions of those best qualified to speak upon the subject. Whether or not the question of the effect of alcohol upon heredity be debatable, science leaves no ground for discussion as to the *direct* effect upon the individual. It is not necessary, indeed, to call upon science for demonstration; a walk through a ward for alcoholics, or for the insane in any hospital, lays bare the appalling results of chronic alcoholism—all grades of inflammation of the nerves from that of the single nerve, or group of nerves, to complete paralysis of the arms and legs. There is in the body no nerve which may not become the seat of inflammation induced by alcohol; and the brain itself may become affected, manifesting the injury in delirium tremens, strange delusions, and lapses of memory, under which crimes, impossible to the same individual in normal condition, such as forgery or murder, may be committed, and finally the result is all too often incurable insanity. I will quote from the latest bulletin of Manhattan State Hospital: Of the insane under the care of the state 28% owe their insanity to alcohol as the determining cause. In many instances there are other contributing causes, but these cases of insanity would not have occurred had it not been for the use of alcohol. Dr. Hoch says: From a series of 15,000 male patients admitted to hospitals in New York and Massachusetts, 24% suffered from alcoholic insanity.

Cushny, the most noted modern authority on the action of drugs, says: Even the smallest quantities of alcohol tend to lessen the activity of the brain, the drug appearing to act most strongly, and, therefore, in the smallest quantities, on the most recently acquired faculties, to annihilate those qualities which have been built up through education and experience, the power of self control and the sense of responsibility.

As I have already said, the effect of alcohol upon the brain produces disastrous results easily seen on all sides. As a causative factor in this injury to the brain, and other nerve tissue, we must reckon with alcohol in its effect upon the *blood*. Nerve tissues, as well as all other tissues in the body, depends for its maintenance in a state of health upon the condition of the blood. We find that alcohol profoundly alters the nature of the blood. Reid Hunt of the United States Public Health and Marine Hospital service, in an interesting series of experiments, has produced proof of this: He showed that mice, guinea pigs, rabbits and dogs, to which alcohol has been administered for some time, acquire an increased susceptibility to a certain definite poison, which is termed acetonitril. This occurs after the administration of amounts of alcohol far too small to cause indications of intoxication and from doses which cause almost no demonstrable injury to any bodily tissue. Animals which had received for a few weeks or months very small amounts of alcohol succumbed to doses of the poison, acetonitril, so small as to produce no symptoms in the animals which had not received alcohol. Another fact which goes to show that alcohol has some obscure though very definite effect upon the blood, has recently come under the observation of the medical profession. Within the last half dozen years Wasserman, a German pathologist, has perfected a test upon the blood which detects with great accuracy the presence of the virus of syphilis. The value

to medicine of this discovery is inestimable, making diagnosis possible early enough to prevent, often, the horrible results we formerly feared from this disease. We have been startled to find, the as yet unexplainable fact, that when an individual has been recently drinking, the Wasserman test is valueless, as the blood shows no reaction to it, though the syphilitic poison be present. The disastrous effect of alcohol directly upon the stomach and liver is too familiar to call for comment.

In the end, however, it is the nervous system that alcohol effects most noticeably and constantly. In many cases the damage wrought upon the physical substance of the cells and fibres of the brain and nervous system is of such a nature as to be readily demonstrable by the microscope. In other cases, while the symptoms present convince us that a physical injury has been suffered by the delicate nervous tissue, it is of such a nature as to be not easily shown. In either case, whether the injury be severe or slight, no one presumes to question the fact that the *functioning* of the brain and spinal cord—both the higher function of the intellectual processes, the lower function of presiding over nutrition and maintaining the various organs and their products in a state of health—is interfered with as a re sult of the underlying physical damage. To make this emphatic, let me state that every organ in the body depends for its heathful functioning upon a definite set of nerve cells which preside over it. Now we cannot argue that the reproductive organs, and hence their product, the germ plasm, can be an exception to this universal law. Therefore, if the integrity of the nervous system as a whole is deleteriously affected by the excessive use of alcohol, it is reasonable to assume that the effects go further than the individual by means of reproduction and through the germ plasm, to fall *upon his offspring. This,* it seems to me, *the fact that the germ plasm is thus exposed to the action of any poison circulating through the body,* is the most convincing argument for the transmission of any unfavorable results of alcoholism.

Dr. Adami, of Toronto, has the following to say upon this important point: If syphilis and tuberculosis themselves be not inherited, it is worthy of note that the children of syphilitic and tubercular parentage may exhibit conditions which are derived from the infected state of the parent and are strictly inheritances. Showing no signs of the active disease, they nevertheless exhibit certain stigmata—such as infantile weakness, malnutrition, senile expression, malformations, arrested development, delicate constitutions, precocious mentality, etc. These characteristics are presumably due to the action of the *toxin* on the *germ cells.* Here then we have conditions in the offspring definitely inherited from the parent and due to acquired modification or disturbance of the parental germ plasm. * * * What is true regarding such infectious diseases, must to some extent hold also regarding chronic intoxications of various orders, such as alcoholism, lead poisoning, etc.

I would not have it inferred that the child of alcoholic parentage will necessarily become an *alcoholic.* The child born of a drunken mother *may* come into the world with a craving for rum, or it may not; we cannot tell; if it were so the child would probably survive and soon outgrow the appetite. However, children born of mothers addicted to the use of morphine frequently do not survive. Very recently there came to my notice a case where the death of the child shortly after birth was unquestionably due to the sudden withdrawal of the morphia it had been accustomed to receive through the mother's blood. An instance of this sort of transmitted appetite has no real bearing upon the question of heredity. It simply shows that, while there is no *nervous* connection between the mother and the unborn offspring, the child may be subjected to the unfavorable influence of a poison through the blood stream; it is a matter merely of unfavorable environment. The thing which excessive alcoholism in the ancestry does seem to do is, to prepare a fertile soil for the development of various constitutional and nervous disorders in the progeny. Alcoholism is but one of many agents bringing about such conditions. The poisons of syphilis, tuberculosis and cancer are well-known agents which bring about a posterity equally susceptible to nervous disorders, drunkenness, etc. To put it briefly, science does not permit us to say that alcoholism in the parent is followed as a direct result by alcoholism in the child, any more than tuberculosis begets tuberculosis. It merely endows the child with a lowered

nervous resistance which may manifest itself in one or more of many tendencies—*nervous prostration* or general *inefficiency*, the alcoholism being often but a symptom of these.

It is often difficult to say just what part is played by the alcoholism, as into the heritage of each individual there enter so many influences, both ill and favorable. Yet certain men, whose authority cannot be questioned, have set forth statistics which seem to prove that an ancestry excessively addicted to alcohol leaves its impress in a definite train of abnormalities. Bezzola of Switzerland studied 70 cases of pronounced idiocy, and found that half of these idiots were generated during the wine harvest, New Year's week, and the carnival; that is, in the 14 weeks in which the Swiss chiefly carouse. During these same periods of feasting there was a noticeable diminution in the number of children generated. Demme observed ten alcoholic families and compared them with ten non-alcoholic families: in the alcoholic families, among 57 children there were only ten healthy, 25 dying within the first month of life; while in the non-alcoholic families 50 were healthy, only five dying early in life. Of 37 children in seven families, in which either the grandparents or the mothers were alcoholic, only two were normal. Sullivan found, in statistics gathered from a large number of cases, the mortality of children from alcoholic mothers to be two and one-half times greater than from non-alcoholic mothers. Morel draws attention to the fact that individuals who are given to alcoholism in their youth, as well as the descendants of drunkards, are noticeable for their small stature and feeble muscular development, presenting a type of infantilism. Lancereaux compares this condition with the decendants of the tuberculous, and considers that infantilism is especially marked in the descendants of tuberculous alcoholics; thus he believes that, pushed to its extreme limits, alcoholism creates a special race, as it were, which can continue itself for a certain period with its physical infirmities and vicious tendencies, but happily it lacks the elements sufficient to reproduce itself for any length of time; with its descendants, cursed with impotence and sterility, it rapidly disappears. Lambert, of New York, quotes authorities and statistics in startling numbers, showing the deleterious effects of alcoholism upon the offspring.

In the face of what seems overwhelming evidence that alcoholism deleteriously effects heredity, there has recently been published in London the results of a study of parental alcoholism on the physique and ability of the offspring, from which the authors draw conclusions opposed to those just stated. The more important of these conclusions are the following:

First—The general health of the children of alcoholic parents appears on the whole slightly better than that of the children of sober parents. There are fewer delicate children, and in a most marked way cases of tuberculosis and epilepsy are less frequent than among the children of sober parents.

Second—Parental alcoholism is not the source of mental defect in offspring.

Third—The relationship, if any, between parental alcoholism and filial intelligence is so slight that even its sign cannot be determined from the present material.

While an investigation such as this cannot be lightly passed by, I believe that the field covered by the investigators is too narrow to warrant such sweeping conclusions. There are several reasons for taking issue with these unusual deductions. In the first place, the persons making the investigation were not, so far as I am able to learn, medical men. Furthermore, individuals undertaking such a work should be thoroughly familiar with the obscure and intricate laws governing heredity, and should be able to interpret their findings scientifically. In the second place, the examinations were made upon children too young to be of adequate value. Perhaps the greater number of mental diseases develop after the age of puberty. Again, hereditary influences do not always manifest themselves in the first or even second generation. Adami, the noted authority on heredity, makes the following important point: Constitutional disease or intoxication in either parent by reason of its effect upon the germ plasm, may give rise to perfect development of the offspring—no appearance of functional disease or lessened resistance; the offspring of these again being perfectly normal, *but showing in subsequent generations constitutional weakness.* Finally, when we learn that the above-mentioned investigators made their

observations not in the families of the totally abstinent, as compared with the intemperate in the use of alcohol, but in the families of the temperate users as compared with the intemperate users, it seems to me that their findings are of very doubtful scientific value.

In conclusion, it is worth mentioning that people generally do not question the fact that the poisons of such diseases as tuberculosis, syphilis, cancer, lead-poisoning, etc., leave a train of hereditary disabilities; it is only when considering the poison of chronic alcoholism, that a difference of opinion exists.

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ULCER OF THE CORNEA.

John L. Dickey, A.M., M.D.,
Wheeling, W. Va.

(Read before Ohio Co. Medical Society, December, 1912.)

The special importance of diseases of the cornea depends upon the fact that they often leave permanent opacities which seriously impair the sight; while complications which frequently attend them may lead to the loss of the eye.

Probably the most common, most painful, most obstinate, most protracted, and most discouraging disease, to both the patient and doctor, among all the complaints that come to the oculist, is ulcer of the cornea.

It is most often caused by traumatism. But it may also result from purulent conjunctivitis; blenorrhoea of the lachrymal sac; abnormal exposure of the cornea, such as may result from paralysis of the orbicularis muscle; a lowered state of the general system, as after typhoid fever or the exanthemata, or during tuberculosis; autoinfection, especially from the alimentary canal; senility, and disturbances in the nerve supply of the cornea, having origin usually, as it seems probable, in the gasserian or ophthalmic ganglion.

The prominent symptoms are pain and photophobia. A young child will bury its head deep in a pillow for hours to protect its eyes from the light, with any form of keratitis, but more particularly with ulcer of the cornea. There may be little or no conjunctival injection; and little or no corneal infiltration surrounding the ulcer; and possibly not much pain; but the photophobia will be present. So we may say dread of light is *the* symptom of corneal ulcer. Exceptionally, however, in the aged, an ulcer of the cornea may develop and continue without either pain or photophobia.

There are ulcers of many forms and many degrees. The *simple ulcer* is a small, grayish spot located at the scleral margin of the cornea. It appears as a minute phlyctenule or blister, or a gouged out depression in the substance of the first and second of the five layers of the cornea. In the simple ulcers pus is never present. Nor is there iritis. Nor is there much conjunctivitis; only a small area of injection near the ulcer. But there is pain, and there is photophobia.

An *infected ulcer* may come from a simple ulcer that has become the focus of infectious inflammation from bacteria which found lodgement in this area and invaded the tissue of the cornea, breaking it down widely and deeply and ultimately resulting in staphyloma or prolapse of the iris.

The *serpiginous ulcer* is an obstinate and troublesome form of the infected ulcer. It has an irregularly curved and wavy margin and a yellow floor; and shows a tendency to spread over the surface of the cornea unattended by vessels of repair, and leaving in its wake infiltrations of pus or broken down tissue. Hypopion, or pus in the anterior chamber, is almost always present. Iritis is almost certain to occur as a complication. Perforation frequently takes place.

A *purulent ulcer* is usually the outcome of an injury and is common among farmers, coal miners, stonemasons and machinists. For some reason the result of a corneal injury is generally bad among farmers. When the cornea is cut or punctured by a blade of corn or a barley straw or a wheat straw, the process of infection is very rapid and frequently, if not generally, results in enucleation. I can recall several such disastrous cases where the injury was caused by barley straw. They may have been *post hoc sed non propter hoc*. When the miner or mason or machinist has had the offending piece of coal or stone or steel removed by a friend's kindly but dirty fingers and the efficient but infected blade of his pocket knife the consequences and result

are apt to be unfavorable. The loss of an eye is more than a misfortune, it is sometimes a disaster. I saw a case recently of a railroad brakeman who had tried to remove a cinder from his own eye with the charred end of a match. The theory was good, for the instrument was purified as by fire, but by such crude methods much harm is often done to the delicate membranes of the cornea.

The *prognosis* of an ulcer of the cornea, as to time, may most safely be given as from six weeks to six months. It is seldom that one is well under the shorter time, and it frequently happens that the longer period is required for treatment. In some cases the progress of infection and destruction is so rapid that the eye is generally enucleated in two or three weeks.

In the *treatment* of ulcer of the cornea it goes without saying, of course, that the primary cause must be kept in mind and properly dealt with. Locally, heat, rest and stimulation are indicated. Heat may be best applied by means of hot compresses, or better, by bathing the eye freely in hot water for ten or fifteen minutes every two or three hours. Rest to the cornea; the splint to a fracture; the plaster cast to a sprain, is secured with atropin, which paralyzes the ciliary muscle and thus keeps the ciliary region at rest; and also paralyzes the circular fibres of the iris and keeps that delicate curtain out of harm's way, for iritis is a common accompaniment of ulcer of the cornea. In a recent case I used a solution of atropin as strong as five grains to the ounce every two hours without being able to keep the pupil dilated. A routine prescription for ulcer of the cornea might be atropin two grains, cocaine five grains, boric acid ten grains to the ounce of distilled water, to be used every three or four hours. For the stimulation of an indolent, slow ulcer I prefer touching it with pure tincture of iodine. Sometimes pure carbolic acid is used with good effect. The iodine or acid may be best applied by means of a little cotton on the end of a probe. The electric cautery may also be used when other remedies fail, cautiously touching the margins of the ulcer. As part of the routine treatment yellow oxide of mercury ointment may be used, half a grain to the dram, a small particle being inserted between the lids and gently rubbed into the ulcer. Any or all of these remedies may be used, and others in addition, ringing the changes, and with patience always, in treatment of ulcers of the cornea.

DISCUSSION.

Dr. E. A. Hildreth 3rd opened the discussion by speaking of the common occurrence of ulcer of the cornea. He stated the cornea was non-vascular and derived its nutrition from lymphatics. He spoke of the use of cocaine for anaesthesia, also of fluoricine and the saturated solution of boric acid. He also stated that the healing of the ulcer was often attended by scarring which causes astigmatism. He also spoke of the use of dionin, and cold applications in the treatment of this condition.

Dr. Kelly does not believe in the use of cocaine for corneal ulcer, nor for any other purpose than that of examination of the eye, or for cauterization. He feared that it would cause degeneration. He regarded chlorine water as especially good on account of its germicidal action. In gonorrheal ophthalmia an ulcer may get a good start on account of the obscurity of the field.

Dr. Aschman took up the pathology of corneal ulcer, and spoke of the pathogenic organisms found in ulcers of the cornea. He thinks that eserin is better than atropin in the treatment, and also believes in cauterization, and the use of boiling water has brought good results. The various operations on the cornea were discussed.

Dr. Oesterling said his experience with the cautery has not been encouraging. He regards clamping of the lachrymal duct and dusting with a mixture of dionin and atropin a good treatment.

Dr. Ackermann said that phlyctenular diseases in children have been found to be due mostly to tubercular infection. He is opposed to the use of cocaine, and thinks that chlorine water diluted with an equal quantity of distilled water a valuable adjunct in the treatment.

Dr. Hildreth 2nd urges the use of calomel as an intestinal antiseptic, and careful attention to the diet in all cases of phlyctenular keratitis.

Dr. Fawcett, Jr., thinks that holocain is better than cocaine in these cases. He said also that the nasal passages should be disinfected.

Dr. Dickey closed the discussion by saying that he had never had any bad effects from the use of cocaine, which he used in combination with boric acid. He had never used the electric cautery. Tincture of iodin was his choice as a caustic. Atropin he liked, as it is not only a dilating agent, but is anesthetic to a certain extent.

GASTRIC ULCER — REPORT OF A CASE.

Wm. Neill, M.D., Charles Town, W. Va.

(Read at Eastern Panhandle Society, December 4, 1912.)

E. A. F.—Female—single—aged 23, first seen June, 1912. Family history—negative.

Personal history.—Patient quite healthy

up to the age of 18, when she had an attack of stomach trouble. Had chickenpox at 8, whooping cough at 11, and a severe attack of typhoid fever at 14. At 18 when she had the stomach trouble her stomach became hard and gave her much pain, especially before meals, and was relieved by eating. She often vomited during this attack, was sick about two months and lost much weight. There was no history of trauma or superficial burns. For the last year she has suffered from heart burn and sour stomach. Ate her meals regularly, but rapidly. At times the skin and conjunctiva had a yellowish tint, which only lasted a few days. First noticed this during the last 18 months. Had slight attacks of vomiting at times; on two occasions vomited much blood. Lately has suffered with much pain in the stomach, which is more marked before meals.

Present illness began about the second week in May, with loss of appetite, sour stomach and headache. These symptoms gradually became worse, and a week later she had slight abdominal pain. This did not cause her to stop work. About the first week in June patient began having severe pains in the epigastric region, which were of a burning, gnawing character, which seemed to be more marked when the stomach was empty. The vomiting, which usually accompanied these paroxysms, she said, "tasted as bitter as gall," and burnt her throat. Twice she vomited much blood. These pains generally appeared about two hours after meals. Lately these have been more marked at night, awaking her from her sleep. The usual time for these pains is about 2 a. m., 11 a. m., and 4 p. m., and are temporarily relieved by eating. During the last few days the pain has radiated to the back, sides and down to the right iliac fossa. The skin over a small area of the epigastrium is sensitive to the touch, and there is one point of exquisite tenderness that can be covered with two finger tips. For the last two weeks there has been a slight yellow tint to the skin.

On physical examination the patient is found to be a fairly nourished young woman, quite comfortable lying in bed. There is a moderate degree of pyorrhoea aveolaris over the upper gums. Over the dorsum and edges of the tongue are seen superficial ulcers about one-eighth to one-fourth inch in diameter, which are painful and inclined to bleed. There is a deformity present giving the chest a boat shaped appearance, otherwise normal. Heart clear. Abnormal resistance slightly greater over recti in upper epigastrium. There is an area of great tenderness on slight pressure (measuring 3x4 in.) just below the costal end in left parasternal line.

Blood Examination.—Fresh blood flows freely, clots readily, no abnormalities seen. Red blood corpuscles, 6.808000; whiteblood corpuscles, 17.400, which in a few days dropped to normal. Blood pressure also normal.

The patient was put on a diet of raw eggs and skimmed milk with lime water and large doses of bismuth subnitrate. On this diet and treatment her symptoms greatly improved. After six weeks in bed there were no subjective complaints whatever, and physical examination was negative No tenderness or muscular regidity over the epigastrium. Patient was discharged.

Diagnosis.—In considering the possibilities of this case, the age of the patient would almost rule out all probability of a malignant growth. Appendicitis and gallstones could also give some symptoms quite similar. There are cases of appendicitis where there is epigastric pain; again the patient having had typhoid fever and transitory icterus might suggest gallstones, but pain on pressure in the lower half of the epigastric region between the xiphoid and umbilicus points to ulcer rather than gallstones, the gall bladder not being palpable.

The characteristic symptoms of gastric ulcer might be summed up as follows: Sour stomach, indigestion and dyspepsia for months, followed by severe epigastric pain, nausea and vomiting of a bitter material and blood, and the fact that the pain comes on an empty stomach, which at times is relieved by eating, again to reappear as an excess of gastric juice is poured out to digest the food taken, would first arouse our suspicion of ulcer. The seat of pain is definite, being covered by the finger tips, and radiates directly back to about the 10th dorsal vertebra and shoulder blade, with great tenderness on light palpation over this area, which is not relieved by pressure.

On examination of the abdomen muscular resistance is greater in the upper epigastric region, with tenderness in an area just

below the costal margin of the right parasternal line.

Blood is found in the vomitus in the following conditions and must be considered in making our diagnosis: Cirrhosis of the liver, carcinoma of the stomach, hyperacidity with hemorrhagic erosions, tubercular ulceration, digestion of the mucosa over an infarcted area, chronic passive congestion, anaemia, Hodgkin's disease, hemophilia, vicarious menstruation, and following abdominal operations, especially those involving the omentum, trauma, etc., again blood in the vomitus may come from the lungs, throat or nasal tract.

The Complications are: Perforation, either into the viscera, gall bladder, pericardium, pleura or subcutaneous tissue, hemorrhage from erosion of a blood vessel, cicatricial contraction, liver abcess, malignant degeneration, fistula into the gall bladder, liver, pancreas or other hollow viscus, adhesion and peritonitis.

Prognosis.—The acute ulcers are more amenable to medical treatment, but grave complications may occur before the digestive symptoms have been very pronounced. The chronic ulcer may last for 12, 18 to 20 years, with intervals of good health. The whole question of prognosis relates to medical and surgical treatment and will now be referred to.

Treatment.—In treating these ulcers it has been found that 75% recover with rest in bed and proper diet and remedies. Surgical treatment is indicated in chronic indurated ulcers when the passage of the stomach contents is interfered with, in secondary hemorrhage, and in perigastric adhesions.

The origin of gastric ulcers is so far unknown, but hypersecretion of hydrochloric acid is held by many to be a strong factor, as through it the mucosa is digested, probably in an area where there is an interference with or limited blood supply; also to embolism, thrombosis or spasm of vessels. The origin of the hydrochloric acid is from the chlorides in the blood (sodium chloride). This is broken up; the chlorine combines with hydrogen and is secreted as hydrochloric acid.

In its report the German Committee on the "Collective Investigation of Ulcers of the Stomach," states: "Any one who studies the clinical aspects of gastric ulcers in an unprejudiced manner will soon come to the conclusion that our knowledge of the greatest of all benign affections of the stomach is distressingly scanty. The etiology of gastric ulcer in man is practically unknown. The explanation of the various symptoms is correspondingly difficult, and that the diagnosis can in most cases be made only with some degree of probability."

THE NON-SURGICAL TREATMENT OF THE LACERATED CERVIX.

R. H. Pepper, M.D., Huntington, W. Va.

(Read at annual meeting State Medical Ass'n. July, 1912.)

From the subject of this paper one would naturally infer that the surgery of the cervix is to be condemned, and some non-surgical treatment to be substituted in its stead, but such is not the case. On the other hand, surgery is to be commended for its certain and speedy relief of the reflex troubles arising from laceration. Unfortunately, however, there are a great many such sufferers who will not consent to the use of the knife, no matter how much relief may be promised them, but who will continue to suffer and often times fall a prey to quack medicines and treatments such as the Lydia Pinkham and other compounds, Viavi Treatments, Christian Science, and others too numerous to mention.

As we all know it is hard, cicatricial tissue that is deposited in and about these tears, and the pressure on the sensitive nerve terminals that produce the trouble, and not the lacerations per se. It is to these poor nervous wrecks, pale and anaemic from defective metabolism, their pains and ills exaggerated from a reflex neurosis that seems out of all proportion to the insignificant cause, that this paper presents a treatment that will give prompt relief by softening this hardened tissue and relieving the consequent pressure upon the nerve endings.

Until recently these lacerations were not considered within the domain of electro-therapy, surgery being the only means of relief. Electro-therapy in the form of a cataphoric application of thiosinamin has been the successful mode of treatment in dissolving these dense cicatrices due to cervical tears, and which promises much for the future in this special field. Then, too,

from this cataphoric medication, not only are the reflex symptoms from pressure of the terminal nerve endings relieved, but the erosions of the cervix, and the chronic subinvolution of the body of the uterus, are also relieved.

In anticipation one can readily see that an acquired sterility from this abnormally hardened cervix may be also cured, and the easy dilatability of the cervix maintained for future child-bearing, and most important of all, "the prevention of destructive metamorphosis tending toward cancerous degeneration."

This solution of thiosinamin was first used by Dr. C. S. Neiswanger in the treatment of keloid growths. He obtained such good results that it led him to try it on the scar tissue of the uterus.

Thiosinamin or allyl sulphocarbamide, is a colorless crystalline substance derived from volatile oil of mustard seed. When using thiosinamin by cataphoresis the electrode must be composed of some metal that will not oxidize from the action of the positive pole of the current, otherwise the salts of the metal will be deposited in the tissues and interfere with the action of the thiosinamin. The ingenious electro-therapeutist, Dr. C. S. Neiswanger, has devised one that admirably does the work. It consists of a brass stem with a platinum tip, the brass stem being insulated its entire length with hard rubber, leaving the platinum tip exposed. This is wrapped evenly with absorbent cotton and wet in the thiosinamin solution, then covered by a perforated hard rubber ball three-fourths of an inch in diameter, which screws on the hard rubber insulation of the stem. The outer surface of this ball is also covered with a layer of absorbent cotton. When the cicatrix is located high up within the cervical canal an electrode of the same construction as the above, terminating in an olive instead of a ball, is preferably used.

The solution is as follows:

Thiosinamin	grs.	xiv
Glycerine	drs.	ii
Sodium Chloride	grs.	v
Water	drs.	vi

M.

The technique of the treatment is as follows:

Have the patient assume the dorsal position as in intra-uterine treatments. A wetted pad, connected to the negative pole of the galvanic current, is placed upon the abdomen. Wet the coverings of the above described electrode with the thiosinamin solution and connect to the positive pole of the same current and pass through the speculum to the cicatrix. Through the rheostat turn on slowly from fifteen to twenty miliamperes of current and maintain for ten minutes.

This will have little or no effect upon the deeper healthy tissues, thiosinamin having a selective influence upon the scar tissue, but it has a tendency to abrade the mucous membrane when much current is used. Treatments, therefore, should not be given too often, usually allowing three or four days to elapse before repeating the treatment. This, however, should be determined by visual inspection of the mucous membrane. In the interim of the above treatments a high-frequency current through a vacuum, glass, vaginal tube will be found advantageous in hastening the relief in existing inflammatory and morbid conditions.

To recapitulate:

The advantages of this treatment are:

(1) It is commended for its simplicity.

(2) It will be embraced by the timid who refuse surgical interference.

(3) It relieves sterility.

(4) It leaves the os uteri soft and patulous, to be easily dilated in future deliveries with less danger of repeated lacerations.

(5) It prevents cancerous degenerations of the uterine tissue.

Selections

PRINCIPLES OF MEDICAL ETHICS.

(Adopted by the House of Delegates of the American Medical Association, June 4, 1912.)

Chapter I.—The Duties of Physicians to Their Patients.

THE PHYSICIAN'S RESPONSIBILITY.

SECTION 1.—A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.

PATIENCE, DELICACY AND SECRECY.

SEC. 2.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician, and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed, except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

PROGNOSIS.

SEC. 3.—A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

PATIENTS MUST NOT BE NEGLECTED.

SEC. 4.—A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case ,a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

Chapter II.—The Duties of Physicians to Each Other and to the Profession at Large.

ARTICLE I.—DUTIES TO THE PROFESSION.

UPHOLD HONOR OF PROFESSION.

SECTION 1.—The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thraldom is to take away all liberty from one's actions and thought." (Nicon, father of Galen.)

DUTY TO MEDICAL SOCIETIES.

SEC. 2.—In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

DEPORTMENT.

SEC. 3.—A physician should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

ADVERTISING.

SEC. 4.—Solicitation of patients by circulars or advertisements, or by personal communications or interviews, not warranted by personal relations, is unprofessional. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary, simple

business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs or offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

PATENTS AND PERQUISITES.

SEC. 5.—It is unprofessional to receive remuneration from patents for surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances, or perquisites from attendants who aid in the care of patients.

MEDICAL LAWS—SECRET REMEDIES.

SEC. 6.—It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

SAFEGUARDING THE PROFESSION.

SEC. 7.—Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER.

PHYSICIANS DEPENDENT ON EACH OTHER.

SECTION 1.—Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

COMPENSATION FOR EXPENSES.

SEC. 2.—When a physician from a distance is called on to advise another physician or one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

ONE PHYSICIAN TO TAKE CHARGE.

SEC. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

ARTICLE III—DUTIES OF PHYSICIANS IN CONSULTATION.

CONSULTATIONS SHOULD BE REQUESTED.

SECTION 1.—In serious illness, especially in doubtful or difficult conditions, the physician should request consultation.

CONSULTATION FOR PATIENT'S BENEFIT.

SEC. 2.—In every consultation, the benefit to be derived by the patient is of first importance. All the psysicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy and these should never be permitted between consultants.

PUNCTUALITY.

SEC. 3.—It is the duty of a physician, particularly in the instance of a consultation, to be punctual in attendance. When, however, the consultant or the physician in charge is unavoidably delayed, the one who first arrives should wait for the other for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or if it be the desire of the patient, he may examine the patient and mail his written opinion, or see that it is delivered under seal to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

PATIENT REFERRED TO SPECIALIST.

SEC. 4.—When a patient is sent to one specially skilled in the care of the condition

from which he is thought to be suffering, and for any reason it is impracticable for the physician in charge of the case to accompany the patient, the physician in charge should send to the consultant by mail, or in the care of the patient under seal, a history of the case, together with the physician's opinion and an outline of the treatment, or so much of this as may possibly be of service to the consultant; and as soon as possible after the case has been seen and studied, the consultant should address the physician in charge and advise him of the results of the consultant's investigation of the case. Both these opinions are confidential and must be so regarded by the consultant and by the physician in charge.

DISCUSSIONS IN CONSULTATION.

SEC. 5.—After the physicians called in consultation have completed their investigations of the case, they may meet by themselves to discuss conditions and determine the course to be followed in the treatment of the patient. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending, or by their common consent; and no opinions or prognostications should be delivered as a result of the deliberations of the consultants, which have not been concurred in by the consultants at their conference.

ATTENDING PHYSICIAN RESPONSIBLE.

SEC. 6.—The physician in attendance is in charge of the case and is responsible for the treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the mode of treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, at the next consultation, he should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the attending physician, a consultant may provide for the emergency and the subsequent care of the patient until the arrival of the physician in charge, but should do no more than this without the consent of the physician in charge.

CONFLICT OF OPINION.

SEC. 7.—Should the attending physician and the consultant find it impossible to agree in their views of a case, another consultant should be called to the conference or the first consultant should withdraw. However, since the consultant was employed by the patient in order that his opinion might be obtained, he should be permitted to state the result of his study of the case to the patient, or his next friend, in the presence of the physician in charge.

CONSULTANT AND ATTENDANT.

SEC. 8.—When a physician has attended a case as a consultant, he should not become the attendant of the patient during that illness, except with the consent of the physician who was in charge at the time of the consultation.

ARTICLE IV.—DUTIES OF PHYSCIAN IN CASES OF INTERFERENCE.

CRITICISM TO BE AVOIDED.

SECTION 1.—The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician

SOCIAL CALLS ON PATIENT OF ANOTHER PHYSICIAN.

SEC. 2.—A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation should be on subjects other than the physical condition of the patient.

SERVICES TO PATIENT OF ANOTHER PHYSICIAN.

SEC. 3.—A physician should never take charge of or prescribe for a patient who is under the care of another physician, except in an emergency, until after the other physician has relinquished the case or has been properly dismissed.

CRITICISM TO BE AVOIDED.

SEC. 4.—When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic.

EMERGENCY CASES.

SEC. 5.—When a physician is called in an emergency and finds that he has been sent for because the family attendant is not at hand, or when a physician is asked to see another physician's patient because of an aggravation of the disease, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the family physician after he has reported the condition found and the treatment administered.

WHEN SEVERAL PHYSICIANS ARE SUMMONED.

SEC. 6.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as the exigencies of the case permit, or on the arrival of the acknowledged family attendant or the physician the patient desires to serve him, the first physician should withdraw in favor of the chosen attendant; should the patient or his family wish someone other than the physician known to be the family physician to take charge of the case the patient should advise the family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital, the patient should be returned to the care of his known family physician as soon as the condition of the patient and the circumstances of the case warrant this transfer.

A COLLEAUGE'S PATIENT.

SEC. 7.—When a physician is requested by a colleague to care for a patient during his temporary absence, or when, because of an emergency, he is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy as he would have one of his own patients cared for under similar circumstances. The patient should be returned to the care of the attending physician as soon as possible.

RELINQUISH PATIENT TO REGULAR ATTEDANT.

SEC. 8.—When a physician is called to the patient of another physician during the enforced absence of that physician, the patient should be relinquished on the return of the latter.

SUBSTITUTING IN OBSTETRIC WORK.

SEC. 9.—When a physician attends a woman in labor in the absence of another who has been engaged to attend, such physician should resign the patient to the one first engaged, upon his arrival; the physician is entitled to compensation for the professional services he may have rendered.

ARTICLE V.—DIFFERENCES BETWEEN PHYSICIANS.

ARBITRATION.

SECTION 1.—Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Boards of Censors of a component society of the American Medical Association.

ARTICLE VI.—COMPENSATION.

LIMITS OF GRATUITOUS SERVICE.

SECTION 1.—The poverty of a patient and the mutual professional obligation of physicians should command the gratuitous services of a physician. But institutions endowed by societies, and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes, should be accorded no such privileges.

CONTRACT PRACTICE.

SEC. 2.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

SECRET DIVISION OF FEES CONDEMNED.

SEC. 3.—It is detrimental to the public good and degrading to the profession, and therefore unprofessional, to give or to receive a commission. It is also unprofessional to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the service he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient.

Chapter III—The Duties of the Profession to the Public.

PHYSICIANS AS CITIZENS.

SECTION 1.—Physicians, as good citizens

and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should co-operate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine.

PHYSICIANS SHOULD ENLIGHTEN PUBLIC—DUTIES IN EPIDEMICS.

SEC. 2.—Physicians, especially those engaged in public health work, should enlighten the public regarding quarantine regulations: on the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions; and concerning measures for the prevention of epidemic and contagious diseases. When an epidemic prevails, a physician must continue his labors for the alleviation of suffering people, without regard to the risk to his own health or life or to financial return. At all times, it is the duty of the physician to notify the properly constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities of the locality in which the patient is.

PUBLIC WARNED.

SEC. 3.—Physicians should warn the public against the devices practiced and the false pretensions made by charlatans which may cause injury to health and loss of life.

PHARMACISTS.

SEC. 4.—By legitimate patronage, physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support. Moreover, whenever a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits all claims to the favorable consideration of the public and physicians.

CONCLUSION.

While the foregoing statements express in a general way the duty of the physician to his patients, to other members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides these herein set forth. In a word, it is incumbent on the physician that under all conditions, his bearing toward patients, the public, and fellow practitioner should be characterized by a gentlemanly deportment and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the public, and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community.

COLDS AND CATARRHS.

Isaac M. Heller, M.D., New York.

(From an excellent paper in *American Medicine* we extract only the part that bears on treatment.)

The treatment of colds and catarrhs could well occupy the attention of your body for a whole evening without exhausting the subject, so I will not attempt to do more than touch a few of the high spots.

If seen early (within the first 24 hours), a simple acute rhinitis is well treated with a brisk purge and profuse sweat. This is best done at home with a hot bath followed by rolling the patient in a blanket without a nightgown and administering 5 to 10 grains of Dover's powder and a large glass of hot lemonade. He should be in the blankets two hours before changing. This to my mind is superior to a Turkish bath where the sweating is interrupted by the cold water and alcohol rubs. After the first 24 or 36 hours this treatment is useless since it is of profit only during the stage of congestion which is relieved by free diaphoresis. Later, when there is that stuffy feeling nothing gives more or quicker relief than local applications of 5% cocaine without suprarenal extract. This shrinks the swollen tissues and allows more breathing space. I say without suprarenal extract because, while it too shrinks the structures it also contracts the blood vessels, interfering with the process of resolution besides giving an uncomfortable sensation of the head and teeth. Where no complication is pres-

ent, the case will get well on nothing further than a warm, mild alkaline or saline nasal douche by means of a Birmingham cup followed by a plug of cotton soaked in 1% menthol oil and allowed to remain in the nostrils for 5 minutes. The so-called rhinitis tablet of various makes relieves the early stuffy feeling, but in the later stages is without value. Cases complicated by a sinus infection require somewhat different handling. These must be seen daily and a 10 to 20 per cent cocaine solution placed about the anterior end of the middle turbinate and between this and the outer wall. Its effect is to shrink the tissues away from the natural sinus outlets and allow free drainage. Following this, use a 2 to 5 per cent protargol spray, which should also be given to the patient for use at home three to five times a day.

In the mechanically obstructive cases, there is nothing more to be done except to remove the obstruction after the acute inflammation shall have subsided. Cocaine in any form should not be prescribed for home use but if thought necessary not stronger than 4 per cent and no repetition allowed, to avoid the possibility of habit. As before mentioned, the "cold and catarrh" remedies owe whatever virtue they posses to their cocaine content and their use is strongly to be deprecated. I recall being sent for at three o'clock one morning to attend one of my patients presenting the typical symptoms of acute cocaine poisoning following the local application of a "cold and catarrh" salve.

In acute pharyngitis and tonsilitis, besides free sweating and purgation, our old friend Jacobi's mixture in conjunction with salol or aspirin and phenacetin has given me the most satisfaction. Gargles are of doubtful value, especially in pharyngitis and no use in laryngitis. All highly spiced and irritating food and drinks must be avoided

In acute laryngitis, rest is the most essential and equally difficult-to-obtain therapeutic factor at hand. Inhalations of steam impregnated with benzoin, carbolic, etc., are very soothing; while cold compresses externally give much relief. Internally, pilocarpin gr. 1-100 to 1-50 loosens up the secretions, and codein with antipyrin alleviates the irritating cough. Later when it has become subacute, local applications of silver nitrate 2% hasten resolution.

For the constitutional diseases predisposing to cold it is self-evident that the underlying factors, such as rheumatism and gout, require appropriate treatment. Persons compelled to work in an irritating atmosphere should wear small plugs of cotton in the nasal vestibule or one of the little hay fever sieves on the market to filter out the dust and dirt.

The treatment of catarrhs can be summed up in one sentence: "Remove the cause." Large turbinates, tonsils, adenoids, polypi and spurs should be removed; deviated septa straightened and sinusitis treated or operated upon. All the douches, salves and applications invented cannot help these conditions for obvious reasons. Sinus disease is the most difficult to treat and as it is frequently the starting point of hypertrophies and polypi, must be cured before we can assure our patient there will be no recurrence of his symptoms. Atrophies stand alone so far as treatment is concerned and the main therapeutic measure is cleanliness. Aside from those cases which are secondary to sinus infection (and by the way some authors believe this is the rule) we have nothing to expect from operative interference with the possible exception of submucous parafin injections.

There is one popular fancy I wish to attack and that is the cold bath or sponge hardening process to prevent cold. Of all the overrated and abused medical fads in vogue, this certainly stands at the head. What can be more unreasonable than trying to protect a child from recurrent attacks of croup, tonsilitis or rhinitis by means of a daily cold bath when he has a throat full of tonsils and adenoids and sleeps with an open mouth! Or, who can see the rationality of attempting to avoid a catarrhal discharge by like treatment in an adult with a chronic frontal or ethmoidal empyema? Whatever virtue these therapeutic measures possess (and I am willing to admit they are of value in carefully selected cases) it is only in those falling in class two, constitutional diseases predisposing to colds or during convalescence from some prolonged and depressing illness. Yet it happens that physicians prescribe these baths and rubbings indiscriminately often without looking into the nose or throat. This brings up another point; examine the nose of every patient complaining of a cold or catarrh and

apply a little 5% cocaine if the tissues are so swollen that you cannot see clearly. Often you will be astonished at what you find and save yourself the chagrin of having something discovered by your successor in the case which you never even suspected. True, all cannot be nasal specialists nor is it necessary that an exact or even approximate diagnosis be made by the general practitioner. But, every physician can or should be able to tell a practically normal nose and throat when he sees one, and if instead, he discovers a bowing of the septum, a large turbinate pressing thereon, pus trickling downfrom above or rough scraggly tonsils, he knows that the conditions are not as they should be. Such a case coming for the relief of recurrent colds or chronic catarrh is entitled to a more thorough examination by yourself or another if you do not feel satisfied as to the exact state of affairs. No man would think of treating a pneumonia for example without a thorough auscultation and percussion of the chest, yet it is quite common for cold or catarrh to be treated without even a peep into the nose: often taking the patient's statement "Oh, I've got only a cold in the head, Doctor!" for granted.

The following case is illustrative of this: Mrs. T. aet. 45 yrs., complained of catarrh, headaches and at times neuralgia of the left side of the head and face for 9 years. She had used all sorts of patent and home remedies and had been to three physicians, none of whom had looked into her nose. On examination I found a chronic empyema of the ethmoid and frontal sinus with the antrum of Highmore full of foul smelling pus.

In closing, the writer feels that it is almost a sacrilege for him to have attempted to treat so vast a subject in so short a paper, keenly realizing that any subdivision might well and profitably take up a whole evening's discussion. Considering, however, the season of the year and the wide prevalence of these diseases which the general practitioner usually sees first, he believes that if he has succeeded in calling attention not to new, but to often overlooked factors in etiology and consequent treatment, his course is justified.

450 Tremont Ave., East.

USE OF CORPUS LUTEUM.—Dr. Burtram, of Baltimore thus concludes a paper in the *J. A. M. A.*

1. When given by the mouth, corpus luteum tissue of the sow, even in large doses, has little or no toxic effect on woman.

2. It affords us a valuable means of controlling the nervous symptoms which occur in so many patients at the time of the natural or artificial menopause, giving relief to most sufferers.

3. It is a valuable remedy in treating patients with insufficient internal ovarian secretion during the menstrual life. This class constitutes a very large number of women.

4. It is an excellent remedy to induce menstruation in young women suffering from functional amenorrhea. Those who are fat, in addition to regaining menstruation, usually, but not always, lose weight.

5. There would seem to be a possibility for the drug in cases of unexplained sterility and repeated abortions.

6. Extensive use should be made of corpora lutea from the cow, sheep and other animals to determine if these extracts work more successfully than those of the sow. The ideal lutean tissue for any animal is doubtless tissue from its own species, but this cannot be obtained for the woman.

7. So far as it goes, my work strengthens my conviction that Fraenkel is correct in attributing menstruation to the internal secretion of the corpus luteum.

8. From clinical experiences I am inclined to believe that the corpus luteum possesses different properties due to different chemicals. One of these substances causes hyperemia of the pelvic organs; another relieves nervous symptoms of a toxic character as at the menopause. It would seem that this product acts as a neutralizer, since even large doses of the luteum cause no disturbances of a toxic nature. On the other hand, the toxic results of intravenous injections of the lutean extracts as well as the nervous phenomena of menstruation show that there must also be some toxic material present which is not absorbed from the stomach or intestines. All of these various substances may in the future be separated.—*Jour. A. M. A.*

CANCER OF THE OVARY AT FIVE YEARS OF AGE.

Dr. Rosanoff, of Moscow, in Deutsche med. Woch., reports a case of this almost unique incidence. The child was attacked with pains in the abdomen, and a mass as large as the head of a newly-born infant was palpable to the right, between the pelvis and level of the umbilicus. The rapid growth of the tumor suggested malignancy. Laparotomy incision. The tumor was felt to have a pedicle, to-wit, the right adnexa. It was extirpated and found to be a medullary carcinoma. The nearest approximation to this case is one of bilateral cancer of the ovary in a 14-year old subject. Sarcoma of the organ in very young children is encountered in rare instances.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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WHEELING W. VA., FEBRUARY, 1913.

THE JOURNAL is issued on the first of each month.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

ADVERTISEMENTS.

Advertising forms will go to press not later than the th of each month.

Advertisements of proprietary medicines must be accompanied with formulae. Rate cards sent on application.

REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. S. L. Jepson, Ch'n of Pub. Com., 81 Twelfth Street, Wheeling, W. Va.

Editorial

ONCE MORE, JUST ONCE!

A last appeal to the local secretaries to send us the names of physicians within the bounds of their societies who are eligible for membership. In other words, we want the names of any whose character is such as to justify his election to membership. Our former two appeals have brought replies from three secretaries, and lists of names have been sent by Dr. C. W. Rexroad of Ritchie county, Dr. W. H. Sharp of Wood, and Dr. J. R. Bloss of Cabell. To all those whose names have reached us we have sent a copy of the JOURNAL, with the following letter:

MY DEAR DOCTOR:

You have been named to us, by your medical society secretary, as an eligible member. Why not accept the suggestion and apply for membership? You thus join the progressive physicians of the State and mark yourself as one who desires to advance in the profession. Meeting with your fellows is bound to add to your information. It will create a more friendly feeling toward all the members. Their alleged faults will grow less and their merits increase on closer acquaintance.

Membership will bring to you monthly THE W. VA. MEDICAL JOURNAL, a sample copy of which is sent you. Membership also secures the financial aid and the moral support of the State Association in case a suit for malpractice is entered against you. This is liable to happen to any of us. The cost for this support is but one dollar a year in addition to the annual dues. The payment of this is not required if you do not desire the society's assistance.

Come with us and we will do you good. Send your application to the secretary of your local society. Membership there gives you membership in the State Association. Act at once and get the benefit of the whole year's membership.

Sincerely yours,

FRANK LEMOYNE HUPP,
President of State Ass'n.
H. P. LINSZ,
Ch'n Board of Councilors.
S. L. JEPSON,
Editor W. Va. Medical Jour.

If any physician who receives this invitation to join the organized profession declines to do so, he can not charge us with any lack of courtesy, and we must conclude that "Ephraim is joined to his idols," and that we may as well "let him alone." But not many will resist all appeals. We fail to understand how any physician who wishes to do the best for himself and his patrons can remain out of medical societies. We recognize the difficulties of attending societies in the smaller communities, but strongly suspect that the fault lies in the fact that meetings are not held with sufficient frequency or regularity, and that when they are called there is too often a disappointment in the program, a part or all of which has failed to materialize. No society that fails to meet regularly, and to have an assured program, can hope to succeed in retaining the interest of the members. These two essentials must be met, or the society is bound to go down. As a natural consequence of this lapse of interest, as we think, sixty members have failed to pay their dues for the past year. To all of these we have sent an appeal to stand by the societies, and hope that many will do so. Can not you, the members on the field, do something to keep the members we have, by reforming the methods of conducting the society, holding meetings as often as possible, securing a program for every meeting, and opening meetings at the specified hour? This is the method pur-

sued in Ohio county, and the meetings never fail.

Now, our last appeal: Will you not see that some officer of your society sends us the names we have three times asked for, that we may aid you in increasing the membership of the society? This burden we have assumed. It is no part of our duty as editor. And thus far it has taken hours of our time. If this appeal brings no result, we may conclude that our interference in local affairs is not wanted, and shall cease our efforts. S. L. J.

"TAKING THE WATERS."

Under this title, in *Everybody's Magazine* for February, Dr. Woods Hutchinson has a very readable article, written in his usual iconoclastic vein, concerning the many "watering places" of this country and Europe. He shows very clearly that in almost every case the much lauded water has little or no curative properties, and that the benefit derived is largely the result of the large quantity applied both internally and externally. The hygienic value of a more or less prolonged rest from business in places highly favored by nature, and in congenial company, is not overlooked. "A three weeks cure—which is the standard length the world over—means a three weeks vacation in a delightful open-air resort, with plenty of the most agreeable company in the world—that is to say, people who are doing exactly what you are, and are willing to listen to your symptoms on condition of being allowed to relate theirs in return."

The medical profession has long ago learned to place little value in the many waters presented for their use in practice. They know equally well the value of rest and recreation to the man worn out by the never-ceasing rounds of business, or the woman equally worn by her efforts to keep pace with the foremost in the whirl of society. The mind cure plays an important part in many of these cases. The patient has heard of Carlsbad, or Wiesbaden, or some other famous European resort highly lauded for the cure of many complaints. He possibly knows of persons who have gone there as patients and come home restored to health. His not to reason why. He has no doubt that the far-famed water has effected the change. The rest from business cares counts for naught. The delightful scenery, the charming company, enter not into his reasoning. The water is everything, and this can be had only at Carlsbad or some other European spa. So people reason, which "reminds us."

Some years ago we had under our professional care a rather feeble elderly lady who did not gain strength as rapidly as her son thought she should. So he asked the privilege of procuring the formula of a pill which had wrought a wonderful improvement in the health of a New York friend. This friend was a very busy merchant, worn down by long and close attention to a large business, until he felt the necessity of a rest and change. He went to Europe where he spent three months in recuperating. There he found the pill that brought him back to health again, as he thought and my friend thought. The formula came, and was found to contain extract of gentian and cinchonidia,—only this and nothing more. The patient and his Wheeling friend attached no importance to the ocean voyage, to the entire separation from business cares, to a complete rest among congenial friends amid delightful scenes. This wonderful pill had wrought the mighty change.

So it is with those marvelous waters the "taking" of which is so expensive a luxury. The truth is that few of them possess any medicinal properties whatever. The much-lauded water of our Arkansas Hot Springs is simply hot water, and will accomplish nothing for the class of patients who go there, without the specific medication which is there so persistently applied. According to Hutchinson, the patrons of Carlsbad are "taking from ten to fifteen grains of sodium sulphate a day — one-fifth of the amount necessary to produce a laxative result."

But Hutchinson is not the only, nor the most reliable physician to cast doubt on the curative powers of the water at famous resorts. In the *Monthly Cyclopedia* for March last, Dr. Heinrich Stern gives a "peep behind the scenes," and tells some plain truths about the German health resorts. Sad to say, the American physician who refers cases to the German specialist receives his reward in a division of fees, and the patient gets a rest, a big bill, and goes home lauding the waters that have done little good except as the flushing by

the large quantities swallowed is beneficial. Of the famous Nauheim heart cure Stern says:

"On the flimsy basis of carbon dioxide and Swedish gymnastics the reputation of Nauheim rests. Granted even that there ensues a transitory subjective well-being immediately or soon after a Nauheim bath or exercise, is there really a thinking physician who will maintain that lasting benefit to the genuine cardiopath will result from a course of the Nauheim treatment? I can assure you that the Nauheim physicians entertain no such illusion. Some go even so far as to declare, in private of course, that the treatment has no alleviating influence at all upon instances of organic heart disease. And they are in the right. Many go to Nauheim who never return alive. They are buried or shipped to the railroad station in the dark of the night. Day funerals are prohibited; they cast a gloom over the remaining guests. Health resorts may serve a good purpose. They remove the patient from his usual surroundings to a salubrious environment; they form an oasis in this life of drudgery and suffering. Their mineral springs even may be of some use to some patients, but they are not essential. In fact many a patient recovers at a spa in spite of its waters.

Fake promises and fake practices must be suppressed as we suppress fake medicines. The fake sanatorium with its eccentric dietary and pseudoreligious atmosphere has no place whatsoever in the honest practice of medicine. It is these and the railroad companies, exploiting every spring of tepid water along its lines as a cure-all, that are preventing a natural development of spas like our own Saratoga."

Stern recognizes, as must all physicians, that cures do often result at these health resorts, but it is the combination of change of surroundings, rest, bracing air, regulation of diet, hydrotherapeutic and balneological procedures in general, which brings about the improvement. S. L. J.

PRINCIPLES OF ETHICS.

We do not apologize for printing the Principles of Ethics in this issue of the JOURNAL. This is the revision as made at the last meeting of the American Medical Association. Every one should make a careful study of this revision, as there are quite a number of changes. No one is too familiar with the duties of physicians as here set forth. To an intelligent practitioner wanting to do exactly the right thing, the Golden Rule may be sufficient; but not all physicians are able to discriminate in every case that may arise in practice. We ask especial attention to the sections governing consultations. Many of our number do not hesitate to accept a case to which they have been called as consultants. For two excellent reasons this should never be done. First, to be called as a consultant implies that the attending physician places confidence in the honor and judgment of the one called. Second, to take charge of the case after seeing it in consultation, leaves the impression that some underhand work has been done. Physicians should lend no encouragement to the too common practice of changing the attendant, which is so often done without any good reason We will all profit by remaining loyal to our colleagues as long as duty to patients will permit. S. L. J.

By a clerical error the following names were printed in the list of members in our last issue. To date they have not signified their intention to remain in the Association. although we hope they will do so: Drs. J. C. Anderson, J. A. Baker, W. C. Beard, N. Burwell, B. B. Bushing, H. S. Castleman, Jas. H. Duff, N. Goad, C. M. Hawes, O. Herrenkohl, O. L. Hudkins, Jos. Mayer G. W. Shriver, J. W. Thornburg.

Dr. W. P. Megrail writes that a sponge or a bit of cotton saturated with gasoline rubbed over surgeon's adhesive plaster will make it loosen from the skin instantly, so that it may be removed quickly without pain or difficulty.

DIABETES MELLITUS.

I am undertaking an exhaustive research into the pathology, etiology and dieto-therapy of Diabetes Mellitus. I am very anxious to hear from every physician in the United States who has a case under treatment, or who has had any experience in the treatment of this malady. Von Noorden says "the best treatment for the diabetic is the *food* containing the *greatest* amount of *starch* which the people can bear without harm." If any physician who reads this has similar or contrary experience, and would take the trouble to write me, I would esteem it a special privilege to hear from him, if only a postal card.

Kindly address

WILLIAM E. FITCH, M. D.
355 W. 145th St., New York City.

Editor W. Va. Medical Journal:

ELKINS, W. VA., Jan. 29, 1913.

No doubt your readers will be interested to know that progress is being made with the proposed public health bill referred to by Dr. Wingerter in the last issue of your Journal. The lobbying committee reports that in a conference with the Attorney-General it was decided that

the draft of the bill as drawn up at Clarksburg by the joint committee on public health does not quite cover the ground. The truth of the matter is, the whole Chap. 150 of the Code needs thorough revision. At the time of the Clarksburg meeting, the joint committee hesitated to undertake all this, fearing that it might fail to accomplish anything. Since then, however, it was found that the time is propitious for radical and extensive revision. The lobbying committee aims to have a resolution passed by the Legislature calling for the appointment of a commission of physicians and lawyers to prepare a suitable bill. As there seems to be a probability that we are to have a special session of the Legislature this spring, we hope that the consideration of this bill will be included in the Governor's call.

No doubt you have noticed that part of the Governor's message in which reference is made to the State Board of Health.

Yours very truly,
WM. W. GOLDEN.

(The Governor's message is called to our attention too late for the insertion of his remarks touching the Board of Health. We have space only to commend his position in recognizing the disgraceful inadequacy of the appropriation of $1,500, and he is recommending that the Board's powers be greatly increased in the interest of the public health. We are very glad here to recognize the Governor's great interest in the things that make for the health of the people. Without money the Board can not be expected to do anything toward lessening the amount of typhoid and other sickness in the state.—EDITOR.)

The Federation of State Medical Boards will hold its annual meeting at the Congress Hotel, Chicago, on Tuesday, February 25th, 1913.

Essayists, eminently qualified, will prepare papers upon a number of interesting subjects.

These subjects are all of practical and vital interest to medical colleges, medical examining boards, the profession at large and the public.

Those contributing the papers on these subjects come with years of experience and no medical board can afford not to be represented. An earnest and cordial invitation to this meeting is extended to all members of State Medical Examining and Licensing Boards, teachers in medical schools, colleges and universities, delegates to the Council on Medical Education of the A. M. A., to the Association of American Medical Colleges and to all others interested in securing the best results in medical education and legislation.

GOOD SECRETARIES SHOULD BE GIVEN LIFE SENTENCES.

This is the time of the year when many of our county medical societies are holding their annual elections and are selecting the men who will have charge of their society activities during the coming year. While it is important that all of the officers in a wide-awake and active medical organization should be filled by efficient and energetic members, the position of secretary is perhaps of more importance than all the rest combined. It has come to be accepted in medical organization that the activity and efficiency of a local medical society is measured largely by the effectiveness of the secretary. If he is an energetic, active officer, keenly appreciating the responsibilities and possibilities of his position, understanding the many opportunities for usefulness to the public and the profession, quick to see the need for action, and clever and original in devising methods by which these needs can be met, then, as a rule, the society is also wide-awake, efficient and active, and a power in its community. If, on the other hand, the secretary is inactive and inclined to stick close to the beaten track of conventional methods, interest in the society is apt to die out and the organization will become a perfunctory one, lacking in real efficiency and influence. The principal problem before each of our county societies is to find among its members the ideal man for an executive position. Happy is that society which has found such a secretary! He should be retained just as long as he is willing to serve, in order that his ability and energy, and especially his experience may be utilized by the organization. Good secretaries should be searched for without ceasing until they are found, and having been found they should be given the support of every good member of the society and should be continued in office as long as they are willing to serve. While the other offices may be distributed as honors to deserving members, for the good of the public, the profession and the organization, let the good secretary be retained as long as he is willing to carry on his self-sacrificing work.—*Editorial in Jour. A. M. A.*

MEDICAL DEFENSE

Remarks of President Evans at the annual meeting of the Wisconsin State Medical Society:

"At the risk of tiring you, I want to say that this medical defense means a whole lot to the profession. We have had two malpractice suits in my town during the last year, one of which I had to defend myself and while the State Society did not defend it, that is, it caused no expense to you, I appreciated then what this organization of ours means to a doctor when he gets into trouble. They had to go outside of town to get a doctor to give expert evidence, and they only get him because they got him filled up, and he had sore spots against me; but when it came to a trial, it took a bench warrant to get him in the witness chair, and when he got there he did not say anything harmful, and the case was thrown out as soon as the prosecution had put in their evidence. In the other case the court allowed it to go to the jury, and within 45 seconds the jury were knocking on the door, and the attorney for the prosecution said, 'Your Honor, I think they have come out for further instructions.' But they came out and handed in a verdice of 'Not guilty;' and the lawyer said, 'I never saw such a bunch of doc-

tors as there are in La Crosse; you cannot get one doctor in La Crosse to testify against the others.'

"I think one great feature of getting in new members is this feature of giving medical defense, not merely because we defend in these cases, but it creates a sort of good-fellowship such as I think nothing else does."

DEATHS OR PHYSICIANS IN 1912.

During 1912, 2,120 physicians died in the United States and the Dominion of Canada. Reckoning on a conservative estimate of 150,000 physicians, this is equivalent to an annual death of 14.13 per thousand. The average annual mortality for the period from 1902 to 1912 inclusive was 15.93 per thousand. The average age at death was 60 years and 23 days. The general average at death since 1904 is 59 years, 9 months and 28 days. The number of years of practice varied from 1 to 76, the average being 33 years, 2 months, 14 days. The average for the past 9 years is 32 years, 4 months and 8 days. The chief death causes in the order named were senility, cerebral hemorrhage, "heart disease," pneumonia, external causes and nephritis. The causes assigned for the 90 deaths from accident were poison, 16; falls, railway, automobiles and by animals, each 10; drowning, 9 (four physicians went to death on the *Titanic*); asphyxia and firearms, each 5; burns and street cars, each 4; strangulation, crushing and freezing, each 2, and sunstroke, 1. Thirty-six physicians ended their lives by suicide. Of the 12 homicides, 11 were due to firearms and 1 to a crushing injury from a blunt instrument. Of these 5 occurred in feuds or affrays.

During the year 306 died who had served in the Civil War, and of these 98 followed the fortunes of the Lost Cause, 97 were medical officers of United States Volunteers and 3 were medical cadets. There were 5 veterans of the Mexican War; 13 had served in the Spanish-American War and 10 had seen service in foreign wars. The Army lost 10 medical officers, past and present, 4 officers of the Medical Corps on the active and inactive lists and 18 acting assistants or contract surgeons. The Navy lost 16 medical officers, the Public Health Service 10 officers and the Revenue Cutter Service 1. The death-loss of the organized militia was 24, of whom 9 had attained the grade of surgeon-general.

Of those who died, 2 had been members of Congress; 2 governors of states; 11 members of the state senates; 54 members of the house of representatives; 54 had been mayors, 32 councilmen or aldermen; 56 had served in various civil official positions; 14 had been postmasters; 19 editors of medical or lay journals; 15 were also clergymen, of whom 8 were or had been foreign missionaries; 1 had been an attorney; 8 had been members of the diplomatic corps, one of whom was minister to Liberia, and 24 were bankers. These figures are from the annual tabulation of deaths among physicians made by *The Journal of the American Medical Association.*

RECENT ADVANCES IN OUR KNOWLEDGE OF COMMUNICABLE DISEASES

Our knowledge of the causes of infectious diseases has advanced not uniformly, but by leaps and bounds as new methods have been developed and new incentives have arisen. With the evolution of bacteriology, following the work of Pasteur and Koch, there was a rapid expansion in our knowledge of infections. The discovery that Texas fever was transmitted by the tick started extensive studies on the relation of insects to the transmission of disease. The demonstration that certain diseases are due to germs too small to be seen through the microscope rapidly led to a study of many obscure diseases and cleared away much of the confusion regarding them. Great epidemics have furnished an incentive for the most exhaustive study of some of our essentially epidemic diseases, as cholera, plague, influenza and meningitis. In addition, greater experience in interpreting results; the training and development of men for research; the foundation and endowment of large institutions for research, such as the Rockefeller Institute, the Memorial Institute and the Hygienic Laboratory of the United States Public Health Service, and the adoption of new methods by research workers, have made possible the recent increase in our knowledge of this class of diseases. The use of the monkey as an experimental animal, has contributed more than any other factor to the important recent additions to our knowledge of the acute infections, says *The Journal of the American Medical Association.* Recent work has shown that the monkey is susceptible to a number of diseases which affect man but which are transmissable with difficulty, if at all, to the small laboratory animals, such as rabbits, rats and guinea-pigs. Through this new medium of experiment we have been able to reproduce these diseases at will and to study them under laboratory conditions. Without the monkey as an experimental animal our knowledge of typhus fever, poliomyelitis, measles, cerebrospinal meningitis and scarlet fever would not have made its recent great advances; indeed, it probably would have remained at a standstill for many years to come.

Unfortunately the application of this knowledge to the control and eradication of the diseases has not kept pace with its acquisition. With a few notable exceptions, such as the control of yellow fever through mosquito eradication and of bubonic plague by rat campaigns, health authorities have been slow to apply the great mass of information now available to them by reason of the researches of the last few years. What at present is more needed than research is a more general application of the results already at hand. Our lawmakers should be informed that it requires money to carry out the measures for the control of diseases which have been pointed out so convincingly by laboratory studies. Who can predict how many lives would be saved and how many cripples for life prevented if means were provided for fly campaigns next summer in order to carry into effect measures for the prevention of poliomyelitis by the control of the stable-fly?

State News

STATE BOARD OF HEALTH.

Report of Examination for Licenses to Practice Medicine—Meeting at Wheeling, Nov. 11, 12 and 13, 1913.

Number of subjects examined in, 16; total number of questions, 170; percentage required to pass, 80; partly oral and partly written. Total number examined, 30. Number passed, 19. Number failed, 11.

The following applicants passed:

Name, W. P. Bean; school of graduation, University of Tennessee; home address or previous location, Keystone, W. Va.

E. R. English, Maryland Medical College, Huntington, W. Va.

C. L. Goldsmith, Maryland Medical College, Baltimore, Md.

J. C. Schulz, Ohio Miami Medical College, Cincinnati, O.

R. F. Farley, University of Louisville, Holden, W. Va.

G. C. Seitz, University of Pittsburgh, Pittsburgh, Pa.

S. A. Dawson, University of Pittsburgh, Pitts burgh, Pa.

W. H. Thompson, University of Pittsburgh, Washington, Pa.

J. D. Baum, American School of Osteopathy, East Liverpool, O.

O. L. Quillen, College of Physicians and Surgeons (Balt.), Letart Falls, O.

R. D. Roller, Jr., University College of Medicine, Eccles, W. Va.

H. S. Gloster, Howard University, Wilkesbarre, Pa.

A. D. Carr, Howard University, Washington, D. C

J. J. Williams, Howard University, Johnstown, Pa.

E. deI. McSween, Howard University, Washington, D. C.

H. H. James, Howard University, Washington, D. C.

G. W. Chappell, Howard University, Pittsburgh, Pa.

C. A. Rogers, Leonard Medical College, Atlantic City.

L. Horwitz, Jefferson Medical College, Pittsburgh, Pa.

Admitted by reciprocity:

S. E. Massey, Medical College of Virginia, Wilcoe, W. Va.

H. E. Davis, Medical College of Virginia, Logan, W. Va.

E. M Tanner, Medical College of Virginia Bramwell, W. Va.

W. C. Sparks, University of Virginia, Raleigh, Va.

H. J. Bostetter, University of Marylard, Clarksburg, W. Va.

J. B. Prentiss, Cleveland Homeo., Steubenville, O.

W. B Sager, Jefferson Medical College, Davis, W. Va.

G. D. Kahlo, Bellevue Hospital, White Sulphur.

Z. C. Layson, Hospital College of Medicine, Hinton, W. Va.

R. M. Akers, Lincoln Memorial, Emma, Ky.

E. H. Boon, University of Nashville, Kelleysville.

B. H. Swint, College of Physicians and Surgeons (Balt.), Clarksburg, W. Va.

Those rejected were graduated from the following schools: University of Louisville Medical School, one; Maryland Medical College, two; Baltimore College of Physicians & Surgeons, two; Howard University, two; Leonard Medical College, two; Eclectic Medical College, two.

QUESTIONS.

Special Medicine.—1. Discuss ulcer of the duodenum with a view to making diagnosis. 2. Define, give the etiology and diagnose acute pulmonary oedema. 3. Diagnose and treat ulcer of the cornea. 4. Define external ophthalmoplegia. Give the etiology, prognosis and treatment. 5. Give the etiology, diagnosis and treatment of hypertrophic rhinitis. 6. Diagnose and treat foreign bodies in the nasal chambers. 7. Give the etiology, diagnose and treat chronic laryngitis. 8. Give the indications for intubation of the larynx. Describe technic. 9. Give the cardinal symptoms of tumor of the brain. 10. Give the etiology, diagnose and treat general paresis.—Dr. C. V. Halterman, Examiner.

Anatomy and Embryology.—1. Describe the bones and ligaments of the hip and elbow joints 2. Give articulation of temporal bones and time of ossification. 3. Describe the deltoid muscle and the deltoid ligament. 4. Describe the inguinal canal. What does it lodge, what does it transmit? 5. Describe the fissure of Sylvius. 6. Describe the solar plexus. 7. Name the anatomical divisions of the abdomen. 8. Describe the great omentum. 9. Name bones of carpus and give radial articulation. 10. What vessels supply venous blood to the foetal liver and what change takes place in this supply at birth?—Dr. L. S. Brock, Examiner.

Materia Medica and Therapeutics.—1. Narcotics: Name two, give dose and physiological action. 2. What is normal blood pressure? Name two drugs that reduce, and explain action. 3. Quinine: Give source, principal preparations, dose and physiological action. 4. Write a prescription containing three remedial agents. 5. Poisons: Name three common ones and give antidotes. 6. Describe Young's rule for giving medicine to children. 7. Belladonna: Give preparations, doses, active principles and physiological action. 8. Aspidium: Give therapy. 9. Salicylates: Give therapy 10. Arsenic: Give therapy. —Dr. J. E. Robins, Examiner.

Bacteriology and Hygiene.—1. What is meant by immunity? How is it produced? 2. State the formation and give the process of tubercle development. What organs are most subject to tuberculosis? 3. Name the common bacillis and state their manner of introduction into the system. 4. Name some inflammatory conditions that may result in enlargement of the lymphatic glands and what non-inflammatory condition may produce enlargement of lymph glands? 5. Give the definition and action of agglutinins. 6. At

what temperature, degrees Fahrenheit, are pus cocci destroyed? 7. Name the best way of disinfecting sputum. 8. What foods should be given to children between the first and second years of age? 9. Describe milk sterilization. How is it done? What are the principal adulterations of milk? 10. What hygienic principles should be observed in infant feeding?—Dr. A. N. Frame, Examiner.

Physiology and Histology.—1. Describe the distribution of the Punctiform cutaneous senses. 2. How is the refractive power of the range of accommodation expressed? 4. Describe the phenomenon of contraction of muscle. How recorded? 4. Define and classify muscular tissue. 5. Give the physiology of respiration. 6. Give composition and process of formation of lymph. 7. Tell what you know of the gastric glands. 8. Describe the function of the gall bladder. 9. Give histology of thyroid body. 10. Give histology of testicles.—Dr. R. E. Vickers, Examiner.

Surgery.—1. Describe in detail the technique and discuss the diagnostic and prognostic significance of leukocyte counting. 2. Describe the condition of status lymphaticus and state its surgical significance. 3. Give the pathology of osteomyelitis of a long bone ending in the formation of a sequestrum. 4. Describe in detail two common methods of suturing the skin and two common methods of suturing the intestine. 5. Give the etiology, pathology, symptoms, differential diagnosis and treatment of actinomycosis of the lower jaw. 6. Describe Kocher's method of reducing an anterior dislocation of the shoulder. 7. Describe the common mode of causation of a Pott's fracture and give its symptoms and treatment. 8. Name the common surgical conditions within the abdominal cavity in which nausea and vomiting are symptoms of more or less prominence and how to differentiate these conditions. 9. Describe in detail an amputation through the lower third of leg by a large posterior flap. 10. Give the etiology, symptoms and treatment of a perirectal abscess.—Dr. W. W. Golden, Examiner.

Practice of Medicine and Pediatrics.—1. Differentiate between cerebral vomiting and gastric vomiting. 2. Name six conditions in which subnormal temperature occurs. 3. What is the diagnostic significance of dropsy? 4. Define cyanosis and give its causes. 5. Give the symptoms of arteriosclerosis and state the predisposing causes. 6. Outline the area of normal liver dulness. 7. Differentiate and give pathology of rheumatism and gout. 8. Give the diagnosis and treatment of chorea. 9. What are the apparent differences in throat lesions in diphtheria and follicular tonsillitis. 10. Make a diagnosis of infantile spinal paralysis.—Dr. C. A. Wingerter, Examiner.

Obstetrics and Gynecology.—1. What is menorrhagia, metrorrhagia, amenorrhea and dysmenorrhea? 2. Name the important points in taking a gynecological history. 3. What are indications and contra-indications for use of the sound? 4. Discuss the causes of pyosalpinx. 5. How would you deliver adherent placenta? 6. Give the indications for producing premature labor. 7. Mention some of the important causes of death of the foetus in uterus. 8. How would you manage a case of placenta praevia? 9. Give treatment of puerperal eclampsia. 10. Give the indications and contraindications for the use of forceps.—Dr. M. V. Godbey, Examiner.

Chemistry and Medical Jurisprudence.—1. In what case of poisoning do we use albumin as an antidote? 2. What is meant by ptomain poison? 3. How would you test the gastric contents for morphine? 4. Give a test for indican in urine. 5. Give antidote for poisoning by match heads 6. What common antidotes are usually found around the house for caustic potash poisoning? 7. What is the difference between the mercurous and the mercuric compounds? 8. How would you determine that a full-term dead baby was born alive? 9. What is paranoia? 10. What is rigor mortis? How soon after death does it begin?—Dr. H. M. Rymer, Examiner.

Three cheers for Doddridge County Society, the first in the state to pay dues in full for 1913. Go and do likewise all ye tardy ones. If you can't be first, at least don't remain until the last.

Dr. W. T. Booher, of Bethany, has established a sanitarium in that beautiful village, for the treatment of all chronic diseases. The doctor is an enterprising man and capable of making things go. Success to him.

Dr. A. C. Blake has removed from Tunnelton to Powellton.

Dr. J. R. Collins has removed from Fairmont to Grant Town.

Dr. A. B. Campbell, late of Middlebourne, has removed to California.

Dr. Elias Barg, recently of Cameron, has gone to St. Louis.

Dr. R. V. Lynch, formerly of Clarksburg, has located at Erie, W. Va.

Dr. O. S. Gribble has removed from Beverly to Mill Creek.

Dr. W. H. Wilson, of St. Albans, is spending a few weeks in post graduate work at the New York Polyclinic College and Hospital.

Society Proceedings

PROCEEDINGS OF THE AMERICAN PROCTOLOGIC SOCIETY.

(Continued from the December Number)

VALVOTOMY.

By GEORGE B. EVANS, M.D., Dayton, Ohio

Valvotomy as a factor for the relief of proctitis.

Valvotomy as a factor for the relief of obstipation and constipation.

Valvotomy as a factor for the relief of distinct and isolated ulceration of the distal side and adjacent to the valve.

Valvotomy as a factor in the elimination of bladder and prostatic symptoms reflexly.

The location of the valves. Every case of valvular trouble is accompanied by pathological changes in the valves, and if in the valve, then in the adjacent tissues.

Valvular obstructions are prolific of more trouble than we give them credit for.

Valvular obstructions are causative factors in the production of obstipation in a large per cent. of our cases.

Valvotomy is a justifiable operation, as it not only relieves obstipation and constipation, but often causes reflex and neurasthenic symptoms to disappear; frequently ameliorates and even cures proctitis, and by virtue of the drainage it secures, lessens the tendency to toxemia from intestinal origin.

MULTIPLE ADENOMATA OF THE RECTUM.

A Report of a Case with Symptomatic Relief by Simple Remedies.

By E. H. TERRILL, M.D., of Richmond, Va.

This article was a report of a case of multiple adenomata of the rectum and sigmoid, in a patient 42 years of age, who had been suffering for the past five years. He had frequent stools with mucus, some blood and a great deal of tenesmus. He was having from eight to ten stools daily. He suffered considerable pain throughout the abdomen. Examination showed numerous small tumors scattered through the rectum and sigmoid. Microscopic examination showed these growths to be adenomata. The bowel was intensely inflamed and contained many ulcers. Under irrigation of the bowel with boric acid and the administration by mouth of castor oil and aromatic syrup of rhubarb, improvement was almost immediate. In three and a half months the patient had gained seven and a half pounds, and was comparatively comfortable. The tumors were reduced in size and the ulcers gradually disappeared. While the adenomata are still present the patient is symptomatically cured.

Dr. Terrell emphasized the value of the administration of equal parts of rhubarb and castor oil, and thinks that in simple ulceration of the rectum, this treatment alone is almost a specific. He calls attention to many reports of cases in which adenomata of the rectum are supposed to disappear, and points out that this condition must be merely a hyperplasia with inflammation, and, not true tumors, for the latter are permanent. As regards the predisposition of adenomata to become cancerous, he called attention to the fact that these tumors are benign and are consequently composed of mature tissue, so they can not themselves become immature tissue—which is malignancy. Instead of a malignant degeneration, it is likely that matrices of immature tissue have also been deposited where so many matrices of mature tissue are found, and the growth of the adenomata, with the accompanying inflammation and ulceration, stimulates these immature matrices to develop into cancer; or else, immature matrices are formed from the ulcers, just as they develop from ulcers, in cancer of the stomach. This simple treatment which he proposed not only relieves the patient's symptoms, but by lessening the inflammation and curing the ulcers, it also decreases the chances for subsequent malignancy.

PIGMENTATION OF THE RECTUM AND SIGMOID.

By JEROME M. LYNCH, M.D., of New York City, N. Y.

The paper is based on six cases which came under the observation of Dr. Tuttle and himself. He divided pigmentation into Exogenous and Endogenous.

Endogenous	Hemochromatosis Pseudomelanosis Melanosis
Exogneous	Pigmentation due to Chemicals or Metallic Pigmentation

He proceeded to discuss the origin of pigment, and considered Pick's theory concerning the origin of melanosis in pigmentation of the large bowel, particularly interesting.

It is as follows:

That the connective tissue cells possess an enzyme tyrosinase which converts aromatic bodies into melanin.

After having reviewed the subject of Pigmentation, he reached the following conclusions:

That hemochromatosis is of bacterial origin; that the extent of the disease is dependent upon the severity of the infection; that the probable source of infection is the intestinal tract, possibly starting as an intestinal putrefaction; that this intestinal putrefaction lowers the vitality of the tissues, and thereby the cells of the mucous membrane lose their protective properties, consequently bacteria find ready access to the portal circulation. As a result of this the chromogenic function of the liver is interfered with, consequently the liver becomes surfeited with pigment, and is not capable of abstracting the iron from the hemoglobin, with the result that an excessive amount of pigment is circulating in the blood. That the cells of the intestine probably have a selective action for these pigments, and as a consequence they are deposited in the tissue. That local hemochromatosis may be due to repeated local hemorrhages, followed by infection, and that as a result of this infection the bacteria cause a hemolysis of the blood, forming pigment which resembles hemosiderin, hemotoidin and hemofucin. That these pigments may, or may not, give a reaction for iron.

So little is known about the structural products of melanin or melanoïds, that it is difficult to give the origin of those bodies. Undoubtedly there are several distinct melanins, and their origins must also be distinct. The ferruginous melanins should be considered as originating from the blood pigment until further research proves the contrary. Most melanins yield endol, scatol and pyrol. It has been proved that the enzyme tyrosinase is present in the tissues and further that this enzyme is capable of converting aromatic bodies into melanin.

That Pick's theory is ingenious and worthy of consideration, we admit; but there are points that are hard to reconcile with our present conception of cellular activity.

It is hard to understand why he should attribute to connective tissue cells a highly special-

ized function; that this is directly opposed to all our preconceived notions of this cell, which heretofore has been supposed to have only one function—that of binding other tissues together, with an enzyme of its own nourishment.

It is a well known fact that the cells of the mucous membrane have the power of neutralizing poisons and converting them into insoluble compounds. In the case of mercury and lead they are converted into sulphides, and as a result of this change, blackening of the tissues, somewhat resembling melanin, takes place.

Drs. Tuttle and Lynch believe that the cases reported by the English observers, were as stated, and should not have been included in Pick's series. Further, that as a result of the action of sulphate of hydrogen on the iron pigments, an insoluble sulphide of iron is formed, blackening of the tissues takes place. This is a separate and distinct form of pigmentation, and should not be confounded with melanosis.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Meeting December 9th, 1912.

Dr. Earl Conner, *Juvenile Cataract.* Three cases.

Cases I, II, III.—Three typical cases of juvenile cataract in various traumatic and post-operative stages were shown in boys of 17, 11 and 5 years respectively. In the case where operation had been performed it was done for cosmetic purposes. The operation consists in producing a traumatic cataract and removing the lens. The results from the cosmetic point of view were satisfactory.

Case IV.—*Ulcer of the cornea (malarial).* A young Scotchman of 22 has a series of recurrent grayish opacities on his cornea which did not yield to the usual mode of treatment with the cautery. The ulcers were connected by a grayish line which involved the substantia propria corresponding to the sclerotic coat of the cornea. The patient had five or six relapses and treatment was very unsatisfactory until the cause was recognized. The local symptoms were those of pain, lacrymation, and constitutional symptoms at times became prominent. A tentative diagnosis of malarial corneal ulcer was made and although no plasmodium was found in the blood, twenty to thirty grains of quinine per day, together with tr. of ferri chloride, were administered for six days, at the end of which time the ulcers and constitutional symptoms cleared up permanently. These cases are comparatively frequent in the tropics but very rare in this latitude, and the case is of interest for this reason.

Case V.—*Acute Glaucoma.* The patient, a woman of 67, lost the sight of her left eye five years ago by glaucoma. Four days ago she began to complain of severe pain in her right eye and blurred vision. Redness was marked. Diagnosis of acute glaucoma was made and iridectomy performed. It is now three days after the operation and the patient, who on admission could hardly tell the number of fingers held up before her eye, is able to tell time. Dr. Conner urged the general practitioner to make an early diagnosis of acute glaucoma so that the patient's remaining vision could be saved.

Dr. John C. A. Gerster. Turn Buckle Lowman Clamp Method as a Help in Lane Plating.

The Doctor recalled that there were three possible types of fractures of the long bones—transverse, oblique and comminuted. The freeing and reducing of the fragments takes the longest time and is the point least written about. The clamps are indicated in operative cases with displacement. They are slipped around the shaft of the bone and manipulated until apposition is obtained while an assistant makes sufficient traction to overcome shortening. The Lane plate can then be slipped in underneath the clamps in any position. In a three-piece fracture, two pieces are first clamped and brought into alignment, and these two treated as one piece and then placed in apposition with the third. A screw, one turn of which lengthens it in a left and right direction, serves to keep the clamps at any desired distance apart, and also permits their adjustment in different planes. In an oblique fracture it is at times very difficult to make fragments stay in place. The clamps are applied and fragments spread apart to overcome the one-half inch shortening necessary. In some transverse fractures few difficulties are met with in reduction, and the use of the clamps can be dispensed with.

Dr. C. G. Kerley. Ruptured Ectopic Gestation.

Dr. Kerley exhibited a four months old foetus and a uterus which he removed from a patient who up to the time of the operation had menstruated regularly. The nourishment of this foetus was derived not from the tube but from new vessels formed from the omentum; this gave rise to the much discussed question whether or not it is possible to have an abdominal pregnancy. In the author's opinion this pregnancy commenced as a tubal one, and later by abortion became abdominal.

Dr. Sturmdorff said that two forms of ectopic gestation, the cornual and omental, were the most serious. No authentic cases of an abdominal pregnancy from the very beginning of fertilization is on record. We have no criterion to establish the fact that from the very first moment the ovum is abdominally implanted. It is surprising that many more cases do not terminate in tubal or abdominal pregnancies, when we consider the vicissitudes the ovum is subject to, before reaching the uterus. The question of immediate or deferred operation in ruptured ectopic has been much discussed lately. The speaker is greatly in favor of immediate operation since the danger to the life of the mother is very great.

Dr. Judson A. Quimby. Exhibition of Gastro-intestinal Radiographs.

A number of plates were shown illustrating intestinal stasis due to kinks in the hepatic flexure of the colon, usually the result of old adhesions. This leads to the pyloric spasm, displacement of other organs, varied gastric symptoms, constipation, neurasthenia, and a whole train of others. Dr. Bassler, without wishing to deprecate the work of Dr. Quimby, said that we depend entirely too much upon radiographs for

diagnosis. Too many men are doing this work without being qualified. This is especially so in sanatoria. The X-ray gives an idea for diagnosis which the case does not merit. We should depend more on the clinical diagnosis. For his own part the speaker said he was inclined to interpret conservatively changes in the position of the colon. This organ is normally more subject to changes in position than any other organ in the body. Also it is difficult to diagnose colonic adhesions from these plates.

Dr. F. Kennedy. A case of cerebellar tumor.

The patient, 37 years old had enjoyed perfect health up to 12 months ago. He then began to complain of intense nausea and early morning vomiting. Later began to have unsteady gait, with lurching toward right side. Two months ago unsteadiness in the right hand became noticeable, and also frequent attacks of diplopia. The headaches were only slight but the nausea became more intense.

Physical Examination.—Pupils are equal, and react normally to light and accommodation. There is a marked nystagmus of the cerebellar type; that is, on looking toward the right the movements of the eyeball are slow and swinging, when the eyes are turned to the left the movements are slower. Slight weakness of the right side of the face is present. Complete deafness of the right ear, and taste sense markedly diminished on the right side. The eighth nerve on the right side is wholly destroyed and the seventh is beginning to be affected. Hypotonia on the right side of the body with increased reflexes on the right side are present. The above symptoms all point to a tumor growth at the ponto cerebellar angle where the nerves leave the skull. These growths are usually non-malignant fibroma growing from the sheath of the eighth nerve. Operation is advisable. Success depends upon the methods of removal. W.

GRANT-HAMPSHIRE-HARDY-MINERAL SOCIETY.

KEYSER, W. VA., January 20, 1913.

Editor W. Va. Medical Journal:

The Grant-Hampshire-Hardy-Mineral Medical Society held an interesting meeting in the library of the Cohongoronto Club, Keyser, on January 16th. The attendance was fair and the papers excellent. The program consisted of papers by Drs. Love of Moorefield, and Strahan of Blaine, and the presenting of two post-operative eye cases by Dr. Hoffman of Keyser. One of these cases was an enucleation with the introduction of the "Gold Globe" upon which rested the artificial eye.

It was decided to make the exhibition of clinical cases a more prominent feature of the program for the future meetings.

A committee was appointed to report at the next meeting, upon the advisability of dividing the Society, having one organization embrace that part of four counties lying in the South Branch Valley, and another organization, that section lying in the North Branch Valley. It takes part of two days for some of the members living in one valley to attend the meetings when held in the other, if transportation is made by rail; and during the winter months the roads are in such condition that it is impossible to make the trip of from twenty or forty miles by automobile. Under the present conditions very few of the members from one section attend the meetings held in the other section of our territory.

After the meeting adjourned, the members were entertained at a turkey dinner served by the physicians of Keyser, in the grill room of the club.

Burlington was selected as the place for the next meeting, which will be held some time in April.

An effort will be made to exchange essayists with the County Societies adjoining ours. We believe it will add very much to the interest of our meetings, and the members of the different societies will thereby become better acquainted. We have no desire to appear selfish, but state pride inclines us to look to the doctors of our own state for the most of our foreign papers.

HOLMES YEAKLEY, *Sec'y & Treas.*

KANAWHA SOCIETY.

CHARLESTON, W. VA., Dec. 3, 1912.

The Society met in the assembly room of the Hotel Kanawha, Dr. H. H. Young presiding.

The following officers were elected for the ensuing year: President, P. A. Haley, M.D.; Vice President, J. E. Cannaday, M.D.; Sec'y-Treas, G. B. Capito, M. D. Councilors, H. G. Nicholson, M. D., J. M. McConihay, M.D., B. S. Preston, M. D., M. V. Godbey, M.D. Censors, A. M. Shawkey, M.D., Chas O'Grady, M.D., J. W. Moore, M.D. Delegates, J. T. Sharp, M.D., Atlee Mairs, M.D., G. B. Capito, M.D.

A number of matters of local interest were discussed, after which the Society adjourned.

January 21, 1913. The Society met in regular session Dr. P. A. Haley presiding. 21 members present. Dr. G. A. McQueen read a paper on the administration of salvarsan, and reported a number of interesting cases that had received intravenous injection. The paper was freely discussed by members present.

Dr. McQueen reported one case in which there was a positive Wasserman reaction following the fourth injection of the drug. Dr. Shawkey reported a case observed during post-graduate work in New York, in which there had been nine intravenous injections with a positive Wasserman following each injection. All agreed that mercury and the iodides should be given in connection with treatment by the injection of salvarsan. An interesting point in the technic of injection of the drug was the insertion of the needle into the vein. Dr. McQueen advised that the needle be pushed into the skin directly over the vein, Dr. Godbey along the side of the vein and then into it after loosening the fascia, Dr. Preston advised that the skin be frozen to the vein with Ethyl Chloride thus holding the vein firm before inserting the needle.

Drs. Weldon and Sarver were elected to membership. Society adjourned. G. B. CAPITO, *Sec'y.*

LITTLE KANAWHA AND OHIO SOCIETY.

PARKERSBURG, W. VA., Jan. 23, 1913.

Editor W. Va. Medical Journal:

Owing to untoward circumstances the L. K. & O Med. Soc. did not have its annual meeting Jan. 2; so an adjourned meeting was held Jan. 21, to elect officers and hear reports. Present 10 members.

The Secretary pro tem reported that 9 regular meetings and 2 called meetings were held during 1912. Average attendance at regular meetings 16; largest attendance 33 members; least 8. Dr. Stone, secretary, is not able to be out yet. The treasurer made his report for 1912. At this date, January 21, he had paid to the State Secretary for 43 members, with 45 on the roll for 1912.

Then elected following officers for 1913: Drs. W. S. Link, President; W. S. Stille, Parkersburg, 1st Vice President; U. L. Dearman, Calhoun county, 2nd Vice President, and L. F. Keever, Parkersburg, 3rd Vice President. Drs. W. R. Stone and W. H. Sharp reelected Secretary and Treasurer, also elected councilors.

The President-elect and Treasurer were directed to prepare a program for ensuing year. A committee composed of President Link, Dr. Stout, Fisher and Sharp to memoralize the members of Legislature and Governor to secure larger appropriations for the State Board of Health, so that its work can be extended to promote and secure efficient hygiene and sanitary conditions in West Virginia.

Society adjourned to February 6.

W. H. SHARP, *Sec'y P. T.*

MERCER COUNTY SOCIETY.

BLUEFIELD, W. VA., Jan. 30, 1913.

Editor W. Va. Medical Journal.

The Mercer Medical Society met in regular session at Bluefield, W. Va., on January 18th, at the office of Dr. Thos. E. Peery. The president, Dr. H. R. Fairfax, being absent, Dr. J. B. Kirk presided. After the regular order of business clinical cases were discussed.

Dr. H. G. Seele and Dr. Goodwill were elected members of the society.

The following officers were elected for the ensuing year:

Dr. E. M. Easley, president; Dr. J. H. Craft, vice president; Dr. Joseph McGuire, second vice president; Dr. B. S. Clemens, third vice president; Dr. Chas. T. St. Clair, secretary; Dr. E. H. Thompson, treasurer.

The society then adjourned and repaired to the Busy Bee restaurant, where a Dutch lunch was given by the Bluefield physicians.

The society hopes to do better work this year than they did the past.

Fraternally,

CHAS. T. ST. CLAIR, *Sec'y.*

Medical Outlook

APPENDICULAR DYSPEPSIA.—Dr. Harold Barclay of N. Y. City thus concludes a paper on this subject in *Amer. Jour. Surgery.*

1. That a chronic lesion of the appendix may exist without ever producing an acute attack, and in some instances such lesions can be present without giving any focal signs, such as local tenderness.

2. That such pathological changes in the appendix are characterized clinically by (a) a gastric atony (b) pylorospasm, (c) interference with the intestinal motility.

3. That the intestinal motility may be either depressed producing constipation, which is the most characteristic symptom, or, in certain instances, the peristalsis may be stimulated, resulting in diarrhea.

4. It is often impossible to make a diagnosis, save by exclusion or an exploratory laparotomy.

DIPHTHERITIC SERUM IN HEMOPHILIA.—M. J. Perkins, Spearville, Kan. (*Journal A. M. A.*, October 26), tells of a hemophiliac, with a bleeding family history, who was suffering from a persistent and extensive hemorrhage from a cut over the upper incisors. He was already much weakened from loss of blood, when other horse-serum not being available, he was given 3,000 units of diphtheritic serum, hypodermatically, a pledget of absorbent cotton placed over the cut and the lip drawn down over it. There was still a little bleeding, but it was easily controlled and was less after each change of the cotton, and in two or three days it entirely ceased. The other treatment was the use of calcium lactate, in two doses, respectively 30 and 180 grains by mouth, and iron and arsenic for the subsequent anemia. Perkins credits both the serum and the calcium lactate for the good results in this case.

JAUNDICE AFTER INJECTION OF SALVARSAN.—The untoward effects observed after the use of arsenobenzol by means of intravenous injections are just beginning to be published. Tawa and Mori have written quite an elaborate study on the subject in the Journal of the Tokyo Medical Association. These authors after observing jaundice following an injection of salvarsan treated the liver so far as its function was concerned. Their study and observation led them to the following conclusions:

Jaundice is sometimes observed after the subcutaneous or muscular injection of salvarsan. This salvarsan jaundice, if the term is permissible, occurs from one to three weeks after the subcutaneous injection and continues for five weeks; but, occasionally, a severe cholemia is observed in its course. As a matter of fact, salvarsan jaundice is a consequence of the disturbance of hepatic function and is caused by the injurious effects of the salvarsan itself or by the product of its decomposition on the liver. The prognosis in that form of jaundice is not as favorable as in the catarrhal variety and this

is, no doubt, due to the fact that there exists some organic loss or disturbance.—*Am. Jour. of Dermatology.*

DRUGS IN TUBERCULOSIS.—It is a grave mistake to believe that tuberculous patients should be directed to rely solely on air, rest and food, to the exclusion of drugs.

Such physical measures do not cure patients with restricted means, or those really poor, and anxious, and sorrowful.

Sanatoria which pride themselves on refusing medicinal aids, are not successful.

So-called symptomatic drugs, camphor, opiates, etc., are helpful and indispensable.

Arsenic should be given for months and years. I never treat a pulmonary tuberculosis without it. I seldom give it without a small dose of digitalis. I never give it without a guaiacol salt. My routine has been the carbonate. Many prefer other salts, which are sold under the names of styracol, or thiocol.—Jacobi in N. Y. *State Jour of Medicine.*

THE TREATMENT OF TETANUS WITH MAGNESIUM SULPHATE.—Dr. George Parker in the *Journal of the American Medical Association* for June 8, reports three cases of tetanus that were treated successfully with subcutaneous injections of a 25 per cent. solution of magnesium sulphate (C. P.), from 4 to 10 drams being injected, and repeated as necessary.

The treatment of tetanus with magnesium sulphate solution has proven more and more successful, and it should be remembered by the physician, because it is very easy to prepare a sterilized solution of this remedy and to administer it in suitable doses. The prompt relaxation resulting in Dr. Parker's cases after the injection shows that magnesium sulphate is of value in tetanus.

The author points out that the drug has no specific action, but, by quieting the muscular excitement, it permits the patient to obtain more rest and to take food, thus tiding him over the critical period, while his body is manufacturing its own antitoxin.—*Clinical Medicine.*

TRANSVERSE TRACHEOTOMY.—Keiner lauds the superior advantages of a transverse incision over a tube in the throat as the routine technic for tracheotomy. The functioning of the air passages is interfered with less than with a lengthwise incision, while it is safer and the scar left is much less apparent. He makes a practice of tracheotomizing in every case of descending membranous croup especially when it is complicated with measles. In one of the seven children he has treated by transverse tracheotomy, severe diphtheria had swollen the uvula until it had completely closed the entrance to the throat. After the transverse incision has healed, it forms merely an inward fold in the skin of the neck.

TO REMOVE WARTS.—A. B. Cates, of Boston, describes a painless method of removing warts without disfigurement. His method is based on the fact that if the vessels feeding the warty growth are destroyed, without at the same time injuring the normal tissue, a cure can be effected. The agent that will do this with no injury to the normal tissue, with no pain to the patient and with good cosmetic effect (leaving no scar), is ethyl chloride. This preparation coagulates the blood in the vessels supplying the wart, thus shutting off its nutrition; the wart shrivels up and drops off. A pledget of sterile cotton is wet in cold water and drawn out in a tape long enough to protect the skin for half an inch or more beyond the margin of the wart. Then a fine stream of ethyl chloride is played over the wart until it is covered with frost—and no longer. Should the adjacent skin be frozen, another pledget of cotten is taken, wrung out in cold water, and the frozen area is rubbed gently but vigorously with it. One or two applications at intervals of a week will make most warts disappear; the same is true of moles and angiomas.—*Amer. Practitioner,* June, 1912

THE NEWER VIEWS REGARDING THE DISSEMINATION OF CONTAGIOUS DISEASES.

Dr. Charles Hermann, of New York, in *New York Medical Journal,* August 17, 1912, after minimizing the importance of how contagious diseases *may* be spread, and setting over against popular misconceptions proper data concerning how they *usually are* spread, reaches the following conclusions:

1. As practical sanitarians we wish to know how contagious diseases are *usually* spread, not how they may be *occasionally* spread.

2. It is *persons* not things that spread these diseases.

3. In the vast majority of cases infection is due to *contact,* either with a recognized or an unrecognized case or a "carrier."

4. The spread of contagious disease through the air, through desquamating scales, and through healthy third persons, not carriers, seldom occurs and for practical purposes may be neglected.

5. The disinfection of fomites, rooms, etc., is to a great extent unnecessary, especially as all infected individuals and carriers cannot be controlled.

6. The carrier represents the crux of the whole problem. It seems unlikely that this difficulty will ever be entirely overcome.

7. On account of the existence of carriers, isolation, disinfection, improved medical school inspection, and special hospitals alone cannot have a marked influence on the reduction of morbidity.

8. This can be accomplished only by a method of temporary or permanent immunization against these diseases.

TINCTURE OF IODINE AS A LOCAL APPLICATION IN DISEASES OF THE THROAT.

Sill (*N. Y. Medical Journal,* Dec. 9, 1911) recommends pure tincture of iodine as a local application to the inflamed throats of children. He found that cultures taken from the throat just before the application of the iodine grew lux-

uriantly, while cultures taken twelve to forty-eight hours later showed only small growths of attenuated bacteria. He reports seeing cases heal up "like magic" in two or three days, after one or two applications of the iodine, which ordinarily take a week to get well, treated in other ways. He states his firm belief that tincture of iodine used as a local application to the throat in the acute contagious diseases, both early in the attack and throughout the active stage, will prevent very materially the spread of the contagion to other members of the family or attendants. He advises using a milder preparation consisting of equal parts of tincture of iodine and glycerine when the application is made to the lower parts of the throat, or to the nose, or when the patient is a baby.—*Med. Review of Reviews.*

PETROLATUM TO PREVENT OR RELIEVE POSTANESTHETIC VOMITING.

Ferguson, in the *New York Medical Journal* of June 29, 1912, suggests a line of experiment which possibly may be of value if ether in the stomach does play any important part in post-anesthetic vomiting. It is the administering of liquid petrolatum. This drug is inert as a therapeutic agent, and is an excellent protective to mucous membranes. His experiments are not yet numerous enough to warrant drawing conclusions from them at this time, but his idea is that this bland, unirritating, foreign body which tends to produce easy stools, if given in sufficient quantities, will slowly but surely pass through the alimentary canal, taking with it any ether and holding it in suspension until it is evacuated at the anus. He does not see how olive oil can be of much service in postanesthetic nausea, but if there is any truth in the theory of irritant ether he thinks he can see how use might be made of the United States Pharmacopœia petrolatum liquidum.—*Therapeutic Gazette.*

SURGERY IN EPILEPSY.

Dr. G. K. Collins of Sonyea, N. Y., as a result of his experience draws the following conclusions:

1. Early in the patient's epileptic life, surgery can be of benefit, and but little can be expected in cases of long standing.
2. Operations for the relief of epilepsy are undoubtedly disappointing and but seldom curative.
3. All abnormalities calling for surgical treatment should receive attention.
4. Patients under surgical treatment should be most carefully observed, both previous to and following operation.
5. Medical treatment should be continued.
6. No epileptic should be pronounced as having recovered until two years, and better four years, have elapsed following operation.
7. Lumbar puncture and venesection are of value in the treatment of status conditions in conjunction with other methods of treatment.

Dr. J. F. Munson, also of Sonyea, expresses these views:

There is a decided neuropathic taint in many of the family histories, and if we are to accept this as an important etiological quantity, we must admit that we cannot hope to excise it, along with some focal lesion, or drain it away by a drainage and decompression operation. Similiarly, we find some of our patients who desire operation have alcoholism or venereal excesses as part of their etiological equation. There again the knife is handicapped. In some of the traumatic cases the trauma is not the cause, but is the result of the first seizure, and therefore the operation is of secondary importance.

I think you will agree with me that we need better and more extended diagnosis and weighing of the histories of our cases before approving surgical intervention, and that the surgeon must look to his technique, lest the results of his manipulation be worse than the original condition.—*N. Y. State Jour. of Medicine.*

HOW ABOUT THE GIRL?

We wish to make the declaration of advocating the doctor's right to protect a woman, by giving her, her father, or some adult in her family, information of her fiance's condition, if he be afflicted with any venereal disease. If a man deliberately announces his intention to marry while suffering from one of the venereal diseases, refusing to heed professional admonition not to do so, it becomes the moral duty of his medical attendant to give warning to the girl or some member of her family. If an antiquated code is to stand in the way of saving an innocent young woman from a life-time of woe and possibly a premature death—let us consign it to perdition. All codes regulating our conduct should be based upon common sense and one that is not should quickly be cast aside. The legal phase of this question should not give us any concern, for we need not describe in detail the man's condition—we need not violate the letter of the faith he has reposed in us, and even if we violate both the spirit and the letter, the end justifies. None else but the name and reputation of the patient is at stake and what are these when held up against the future health and happiness of a young trusting woman?

Our women and our country—let's guard them both.—*Am. Jour. Dermatology.*

An infection of the hair follicles of the nose is quickly relieved by the application of a 1% salve of yellow oxid of mercury. —*American Journal of Surgery.*

Polypi are not merely cystic tumors—often spring from a base of diseased bone. Removing the polypi does not cure the disease; the affected bone necessarily must be removed.—*American Journal of Surgery.*

Pain and swelling of the tip of the nose, is often caused by an infection of the hair follicles in the vestibule.—*American Journal of Surgery.*

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Original Articles

PLACENTA PRAEVIA.

H. M. Campbell, M. D., Parkersburg, W. Va.

(Read at Annual Meeting State Medical Ass'n July, 1912).

Before taking up the subject of this paper, I desire to make a plea for more respect for the subject of obstetrics and the obstetrician. It is with pleasure we observe a disposition in some quarters to award this subject something of the consideration it merits; and an inclination to demand more thorough preparation by those who expect to engage in this important branch of surgery.

I would also protest against the separation of obstetrics and gynecology. No one can be a first-class gynecologist who is not first an obstetrician. It seems almost absurd to hear a gynecologist speak with authority on the treatment of some obstetric complication, such as placenta praevia; and preface his remarks with the statement that he "does not practice obstetrics."

Professor Whitridge Williams of Johns Hopkins, in a recent paper, discusses at length the poor equipment of the medical schools of the day for the teaching of scientific obstetrics; and the lack of preparation of the average graduate for the practice of this specialty. His characterization of the graduate as a "man mid-wife" is, in many instances at least, no doubt just. There is, however, a feature of the situation that is seldom mentioned. That is, the lack of appreciation and low estimate of the value of the services of the obstetrician which is prevalent among the laity. This, like all other opinions of the laymen on medical subjects, is fostered by the attitude and teachings of members of the medical profession. The ridiculously small fees often accepted for these services tend to increase this disrespect for the obstetrician in the minds of the people.

Of all branches of medicine or surgery, obstetrics is the most arduous. It requires more patience, coolness, and at times, surgical skill and dexterity than any other. Yet the fees are miserably out of proportion to those received for other medical and surgical work requiring much less skill and physical exertion. Necessarily the practitioner, when so poorly paid, cannot give his patient the time and attention she deserves; much to her detriment and his discredit. A patient will willingly pay a reasonable fee for some minor gynecological operation; will enter a hospital or secure the services of a graduate nurse; but will be astonished if requested to take the same precautions, or if half the fee is charged for the conduct of a difficult labor. The public should be taught that, compared to a high forceps delivery, a version, or any other major obstetric operation, an appendectomy or a simple ovariotomy is easy. And that the morbidity, not to mention mortality of an improperly treated abortion is frightful. If the people only realized what a saving in actual cash a careful and skillful primary repair of a damaged vaginal out-let would mean, they would willingly pay a reason-

able fee for the services of a competent operator.

The lying-in woman and her child are entitled to the best surgical skill. This they will not receive until the obstetric surgeon is given the same respect and remuneration as the gynecologist. For these reasons the practice of obstetrics has been regarded in the past as an undesirable specialty by the majority of the profession.

Gynecologists are many but obstetricians are few. Another serious handicap to the obstetric surgeon and misfortune for the patient, is the custom of employing untrained nurses in this field. This is due, largely, to ignorance and a mistaken idea of economy. This is one of the most trying fields of labor for the nurse, and she should have special fitness and training for her work. She should, of course, be adequately paid. A thoroughly trained obstetric nurse relieves the surgeon from worry in regard to asepsis; she can note the progress of the labor, and relieve him from the necessity of remaining in constant attendance, which in a protracted labor is a matter of no small consequence. And she becomes an absolute necessity when operative interference is required.

We should then urge more thorough preparation, and greater technical skill on the part of the obstetrician. But in order that competent surgeons may enter this field, we must insist that they receive proper recognition and reasonable remuneration for their services.

The practice of obstetrics furnishes many trying positions and serious problems of diagnosis and treatment, but I want to call your attention for a few minutes to one which has been a subject of discussion and a source of dread to obstetricians of all times. And I offer no apology for taking this well worn subject, for several reasons. In the first place, I believe it will be freely conceded that there is no more serious condition that the practitioner of obstetrics is called upon to treat; one in which two lives are at stake, the outcome depending almost entirely upon his judgment, coolness, promptness and dexterity. And furthermore, although this dreaded complication of pregnancy and parturition has been recognized since the 17th century, the last word as to its treatment has not yet been spoken.

In the opening paragraph of a paper read at the Atlantic City meeting of the American Gynecological Society, in May, 1911, Dr. Henry D. Frye, of Washington, D. C., said: "The importance of the treatment of placenta praevia is shown by the fact that the Council of this Society selected it for discussion at the meeting held in New York City, in 1909; and again at the present meeting two years later. Not only is it apparent thereby, that the subject itself is important; but also, that doubt exists in the minds of obstetricians as to the correct treatment of the complication; both by recognized methods and by new methods, principally of a surgical nature, which have been introduced more recently." This being the attitude of the American Gynecological Society towards this very important subject, I feel no apology is required for bringing it before you for your consideration.

As was said before, this abnormal condition has been recognized since the latter part of the 17th Century. In 1780 Rigby differentiated the hemorrhage caused by placenta praevia from that due to the premature separation of the normally situated placenta, calling the one unavoidable, and the other accidental hemorrhage.

In placenta praevia the placenta is situated in the lower uterine segment, more or less completely covering the internal os. It has been divided into several varieties according to its situation. We have placenta praevia centralis, lateralis, marginalis and a variety called placenta praevi succenturiata, the last being a rare form in which the os uteri is covered by a separate cotyledon or lobe of the placenta, which is united to it only by a membranous attachment.

Very fortunately, placenta praevia is a comparatively rare complication. Its frequency has been variously estimated, but it probably occurs about once in every 800 to 1000 labors in private practice. In hospitals it occurs much more frequently owing to the fact that cases of this character are more frequently sent there for treatment. Also, fortunately, the lateral varieties are much more common than the central. It occurs much more frequently in multiparae than primiparae. It also seems more likely

to occur in women who have borne many children in quick succession. This, and the fact that endometritis seems to be a predisposing factor, is about all we know concerning etiology.

As to the mode of formation; it was generally believed previous to 1888 that the ovum became permanently implanted in the region of the internal os; or else in some manner became detached from its situation higher up and became reimplanted in the lower uterine segment.

In 1888 Hofmeier advanced the theory that the placenta is developed in part from a portion of the chorion in contact with the decidua reflexa; this latter bridging over the internal os and later becoming fused with the decidua vera. In 1901, Strassman announced his belief that defective vascularity of the decidua, caused by inflammatory or atrophic changes, caused the placenta to spread over a greater area in order to obtain nutriment; and in so doing often approached or covered the internal os. This theory is favored by Williams of Johns Hopkins. These theories are all interesting, but of little practical importance.

The most prominent symptom of placenta praevia is hemorrhage; usually occurring in the latter months of pregnancy (although it is claimed that not a few abortions occurring in the early months are caused by this condition.) This hemorrhage, coming on after the sixth month of pregnancy, must be diagnosticated from accidental hemorrhage or that caused by premature detachment of the normally situated placenta. This can only be done by vaginal examination, finding the lower uterine segment filled by a soft mass, no foetal part being felt. If a finger can be introduced into the os uteri and the placenta felt, the diagnosis is complete. If the placental souffle can be heard near the fundus, placenta praevia can be excluded, except in a case of twins with double placenta. The hemorrhage may come on suddenly without warning and be alarmingly profuse. Instances have occurred in which the first hemorrhage proved fatal. On the other hand the hemorrhage may be so slight as to occasion little alarm; and the patient may go on losing a little blood from time to time, until she becomes so anemic that she withstands very poorly any surgical procedure which becomes necessary at delivery. Such patients are very prone to become septic. Hemorrhage may occur as early as the sixth month, or as late as the beginning of labor at full term. As a rule, the more nearly central the position of the placenta, the earlier and more serious the hemorrhage.

Treatment.—As was said before, there is no problem in obstetrics or surgery which levies a greater tax upon the resourcefulness, dexterity, and coolness of the operator than placenta praevia. Each case must be treated according to its merits. Several things must be determined at the outset, viz:—the period of gestation, the general condition of the patient, are there any other complications such as toxaemia, nephritis, contracted plevis? Is she a primipara or multipara? How long and how much has she bled? What is the condition of the cervix? Is the child viable? Has labor commenced? These things being determined, we have a choice of several methods of procedure. It may be asked, when shall we interfere in a case of placenta praevia? The answer is the same as to the question, "When shall we operate for appendicitis?" "As soon as the diagnosis is made." A woman with placenta praevia is never safe until the uterus is emptied and packed, and the obstetrician should have constant supervision of the case until this is done. The method or methods selected will depend upon the conditions which obtain and the preference of the accoucheur. We have first to think of the safety of the mother and then of the child, unless the child be already dead or the period of gestation is such that there is no hope of saving it; when, of course, the child is disregarded.

Of the different methods of treatment, we will first consider rupture of the membranes and leaving the case to nature. If the woman is near term, the hemorrhage slight, the os partially dilated, the head presenting, and the placenta is marginal, this procedure may be successful. The rupture of the membranes allows the placenta to follow the retracting uterine wall, and the head coming down stops the bleeding by

compression. This will answer, however, in only the most favorable cases. Second—Gauze tamponade of the cervix and vagina. This method used alone or followed by some other method, is probably more generally used than any other; probably because it is more easily executed than most other methods. Properly applied it is quite satisfactory in many cases. The greatest objections to it are the danger of infection and a false sense of security. To be properly applied the patient should be anaesthetized; and under the most rigid asepsis the os should be exposed and the cervix and vagina firmly packed with sterile gauze. This should not be allowed to remain more than twelve hours; and should not be repeated. The danger of infection increases with each tampon. Second only to hemorrhage is the danger of sepsis in these cases. Upon removing the pack, if dilatation is complete the membranes may be ruptured and the case be left to nature; the forceps may be applied if the head presents; or we may do a podalic version with rapid or slow extraction. If the hemorrhage is not serious and uterine contractions are good. the slower methods may be used; but if hemorrhage is profuse and the patient's condition is bad, we may be forced in the interest of mother and child to use forceps or do a version and quick extraction. On the other hand if dilatation is incomplete, it can be completed by the use of dilating bags, or, if two fingers can be introduced into the uterus, a combined or bi-polar version may be done by the Braxton Hicks maneuver. This latter has been a very popular procedure with many obstetricians. Of the dilating bags there are a number more or less useful. They have been gradually improved since 1831 when Von Schnakenberg used a pig's bladder for this purpose. There is the fiddle shaped bag of Barnes coming in three sizes; the Champetier De Ribes, a conical bag which dilates the cervix as it is expelled or pulled upon; the Vorhees bag, an improvement on the Champetier De Ribes. The Pomeroy bag, a clumsy and complicated affair; and finally, a bag invented within the past year by Dr. Barton Cook Hirst, which it is believed will overcome the objections common to all the others, viz: being too bulky to be practical, slipping out of place when the cervix is partially dilated, and having a tendency to displace the presenting part. The Hirst bag is shaped like a modified hour glass or like the ball of a diabolo set. One-half is inserted into the uterus. On account of its shape it cannot slip out, and when the bag is filled with water up to a definite hydrostatic pressure, the cervix is both dilated and obliterated. The dilatation is permanent. A rapid delivery should never be attempted through a partially dilated os uteri. The cervix in placenta praevia is exceedingly friable, and extensive lacerations extending even into the broad ligaments may be produced by slight violence. For this reason many obstetricians are opposed to any kind of rapid dilatation. Even the method of Harris of using the fingers of one hand may be dangerous if due care is not exercised. If a Braxton Hicks version is done through a partially dilated os, a leg should be brought down and used as a tampon while waiting for full dilatation. Miller of Pittsburgh. has advocated primary ligation of the uterine arteries through the vagina, thereby controlling the blood supply and allowing time to carry out any obstetrical maneuver which may be indicated. He reports several successful cases Caesarean section has been performed for placenta praevia. Both the classical or abdominal and the vaginal have advocates. The percentage of cases of pure placenta praevia which will require Caesarean section is undoubtedly very small. But that a certain few cases, in competent hands and with good hospital advantages, will show a lower mortality both for mother and child than by any other treatment, is generally conceded. The lowered mortality is especially marked for the child. When Lawson Tait proposed Caesarean section for placenta praevia about twenty years ago, he believed the maternal mortality under the prevailing obstetric treatment of the time, to be about fifty per cent. and eighty or ninety per cent. for the child. This, of course, is not true, at least for the present time. With good surroundings and a competent accoucheur, the maternal mortality will probably not exceed ten per cent, but the fetal mortality still remains high;

probably fifty per cent. If we exclude cases demanding Caesarean section on account of other obstetric complications, such as contracted pelvis or toxaemia, which may be co-existent with placenta praevia, the indication is narrowed down to the following conditions; serious hemorrhage with an undilated and rigid cervix, and a viable child. The patient is usually a primipara. With these conditions, and if the patient has not already been infected by ineffectual attempts at delivery, Caesarean section will give excellent results if a good hospital and competent operator are available.

Every case will, of course, be a law unto itself, but it is always desirable to have some definite plan in mind, when attempting treatment of any serious condition. The following general plan of treatment suggests itself; after becoming fully acquainted with all the facts bearing upon the case, if the placenta is marginal, patient in labor with some dilatation and moderate bleeding, simply rupture the membranes and wait. In most all other cases, pack the cervix and vagina with sterile gauze. Upon removing the tampon, if dilatation is complete, either do a podalic version or deliver with forceps. If dilatation is not complete, either do a Braxton Hicks version, or finish dilatation with bags. Delivery by any method should be followed by a careful packing of the uterus.

The three following cases will serve to illustrate the widely varying conditions that may be met in the treatment of placenta praevia, showing that a given procedure may be successful in one case, and disastrous in another.

Case I.—Placenta praevia lateralis complicating twin pregnancy with double placenta. Mrs. J S., a primipara within one week of full term, after some unusual exertion had a slight hemorrhage. With rest in bed the hemorrhage ceased returning with the beginning of labor one week later. The bleeding was slight, but increased with each pain. The os being partially dilated, the membranes were ruptured and the case left to nature. After a somewhat protracted labor the first child was born, but was followed by quite severe bleeding. It was necessary to deliver the second child by podalic sersion. There was an hour glass contraction of the uetrus above the point of attachment of the first placenta, making it quite difficult to deliver the second placenta, after the first had been removed. The patient was very much exhausted and carried a very rapid pulse, accompanied by a profuse watery diarrhea for several days. Fortunately there was no infection and she made a good recovery. Both children lived.

Case II.—Seen in consultation with Dr. Price, was a primipara, 26 years old. Previously healthy. Last menstruation Jan. 5, 1911. First bleeding occurred Sept. 5th, but not being profuse, Dr. Price was not called until Sept. 9th. He at once sent her to the hospital. When seen there with him the hemorrhage had ceased spontanously. Her condition ramained unchanged until Sept. 15th, when she had a profuse flow of blood. She was now about 36 weeks pregnant, with a very rigid cervix that would admit one finger. The placenta apparently completely covered the internal os. Here was a case that presented all the conditions considered by the advocates of Caesarean section necessary to justify that operation. However, we decided to tampon, for 12 hours. Upon removal of the pack, we found the placenta had become detached from the left side of the os uteri, and the advancing head was displacing it to the right. The bleeding now being slight, and the labor coming on, we waited for full dilatation, and delivered with forceps. Both mother and child survived. Upon removing the placenta, it was found that we had a case of placenta praevia succenturiata. A separate lobe which had only a membranous attachment to the main placenta was situated directly over the internal os. Cesarean section would, of course, have been unjustifiable in this case.

A few months after seeing this case, with the subject still fresh in mind, having, in the meantime consulted every available authority, the writer, feeling that he had the treatment of placenta praevia well in hand, met his Waterloo.

Case III.—Mrs. J. T. D., age 26 years, second pregnancy, with a history of abortion in third month one year before, on Feb. 14, 1912, had a slight hemorrhage. She was about 26 weeks pregnant. She was a delicate, nervous woman with a slightly enlarged thyroid. Had not felt well during pregnancy. The child's head was in right iliac region above pelvic brim. The lower uterine segment was filled with a soft mass, supposed to be the placenta; there was no dilatation. A diagnosis of placenta praevia was made, the gravity of the condition explained to her husband, and she was removed to the hospital. On Feb. 22nd she had another slight bleeding which did not affect the pulse. On Feb. 29th the third hemorrhage occurred, and although it was not profuse, and the cervix very rigid and undilated, we felt that she must be delivered. A gauze tampon was applied for 12 hours. She was then anaesthetized, and the pack removed. To our disappointment, the os uteri would barely admit one finger. Bleeding commenced at once, and we were obliged to tampon again. This was allowed to remain over night, during which time she had active labor pains. She was then anaesthetized and tampon removed. There was enough dilata-

tion to admit the whole hand. The placenta was situated almost exactly central. Sweeping the hand to side of it, a shoulder was found presenting, without difficulty a foot was secured, and the thigh drawn into the os. All bleeding ceased immediately. The anaesthetist was told to stop the anaesthetic, as we wanted to extract slowly. At that moment the patient ceased breathing and although every effort was made to resuscitate her, she did not breathe again. Death was almost instantaneous. The child was extracted and easily resuscitated, and still lives. The uterus was firmly contracted, there was no lacerations, and the hemorrhage was not excessive. She had taken only a small quantity of A. C. E. mixture; the whole operation lasting only a few minutes. There was no autopsy and the exact cause of her death is somewhat obscure. Should a similar case present we would hardly know how to improve upon the methods employed. Caesarean section would probably have ended as disastrously and invited more criticism.

In conclusion emphasis should be placed upon the following points of treatment:

1st. Promptness. Treatment should be commenced as soon as diagnosis is certain, and continued until patient is out of danger.

2nd. Asepsis. Nothing but the most thorough asepsis should be tolerated in the technique. These patients are peculiarly susceptible to septic infection, and every effort should be made to avoid it.

3rd. Do not attempt a rapid extraction through a partially dilated os. Dangerous laceration will almost surely be the penalty. Secure full dilatation or deliver by slow extraction.

Discussion.—Dr. Venning said that in the first case with which he had anything to do the mother and child died. In another case where dilators were tried and failed, in trying to dilate with the hand, his arm passed into the peritoneal cavity. In this case the woman recovered.

Dr. Schoolfield insisted that every such case should at once be sent to a hospital, where every facility for proper treatment can be had.

Dr. Sharp spoke of the difficulty of always getting the patient to a suitable hospital. Such institutions do not exist in every part of the country. Skilled surgeons are not very numerous in every locality. He had had some experience such as Dr. Venning's with dilators. We must do the best we can in emergencies. As much skill and courage is required in these cases as in abdominal surgery.

Dr. Murphy had been called to such a case with no instruments of any kind. He brought down one leg and stopped the hemorrhage.

Dr. Mason advocated the use of rubber gloves in these cases. As to the result much depends on the care of the patient receives after delivery. He does not favor Caesarean section.

Dr. Rodgers said that many cases must be treated as we meet them. Believes in Caesarian section. Statistics show that the mortality of both mother and child is not as great as when delivered by other methods. Eighty-five per cent. of children are saved, and the mother's mortality should be nil. This operation is not worse than any other laparotomy, and is preferable to the high forceps delivery.

"THE SIGNIFICANCE OF A HIGH RED BLOOD CORPUSCLE COUNT."

By Carl W. Sawyer, M.D., Marion, Ohio.

It is very customary to state that an individual is "run down" and "anaemic," and that his red blod corpuscles are lessened in number. In fact anaemia is given as one of the most common causes of disease. Seldom, though, do we have anything attributed to the opposite condition; that is, an increase of the red blood corpuscles. Yet this condition is almost as common as the former, and when it exists nearly always brings as serious and as definite symptoms.

Polycythaemia, as this condition is called, means solely an increase of the red blood corpuscles above normal. It has nothing to do with the percentage of hemoglobin, nor the number nor variety of the white blood corpuscles, so we shall not consider these blood conditions in this paper.

Normally, an adult individual in good health is supposed to have between 4,500,000 and 5,500,000 red blood corpuscles in every cubic millimeter of blood. Careful tests show that the average individual has about 4,900,000. In cases of polycythaemia, however, a person may have as high as 8,000,000 reds; one case is on record of 11,500,000; several of the cases in our series show 7,500,000. Any count going over 5,500,000 can be said to be increased over the normal and may be placed among the cases of polycythaemia, and so we count it in our work.

While some authors have been tempted to make the condition a separate disorder, one cannot really say that it is such, but rather a symptom. As we shall attempt to show later, however, it is a symptom which has a great deal of bearing upon the case, and in a certain variety of disorders is one of the leading symptoms which causes many subsidiary ones. In our work

all counts are made with a Thoma-Zeiss blood chamber and a one-sixth objective on the miscroscope. A count is made when we first see the patient, one a week later if he can be reached, one in two weeks, and succeeding ones acording to variations from normal, until the patient again reaches his healthy amount.

By making the count one week after the first one, we check our work and allow for any local conditions in the individual to subside, so that if the two counts show an increase we feel safe in saying that the individual has a polycythaemia; which is really helping to cause the disorder. During the last few years we have kept careful records of our counts in nearly 2400 cases, and since each case has had an average of from 5 to 6 counts, we have a considerable mass of material to draw from. Summing up all the cases we find some rather startling facts.

In the first place, the condition is much more common than ordinarily considered. About 11% of all cases coming for treatment show it. Of course a great deal of our work is done among chronic invalids, and for this reason the result may be a little higher than normally, although over one thousand of these cases were taken from a general list comprising all varieties of acute and chronic disorders. Secondly, while it may occur in almost any disease, and even in normal individuals, it shows a special predilection for certain disorders, and is very often accompanied by peculiar and definite symptoms. It very commonly accompanies mitral heart lesion, especially those where motor nervousness is marked. In this case it is more than likely due to the congested peripheral circulation which exists in this disorder. Many cases of tabes dorsalis (locomotor ataxia), present it. This is true even when the patient is seemingly run down and anaemic; and by the way, it is a rather difficult matter to tell from the appearance of an individual exactly whether or not he is anaemic. In many cases in which the individual seems to have an impoverished blood stream, such a condition does not really exist.

It usually accompanies all forms of morphinism and alcoholism, especially when the patients present themselves deeply under the effects of either of these drugs. Many cases of myelitis also show it, and we have seen several cases of epilepsy, facial paralysis, arthritis deformans, spinal curvature, paralysis agitans, aphasia and exophthalmic goitre presenting it. In all of these diseases, however, it does not seem to be a determining factor, but rather a coincidence than a regular occurrence. It occurs most regularly in that extensive class of cases commonly known as neurasthenia and melancholia. As you all know, both of these disorders cover a multitude of diagnostic sins. Owing to the fact that there are a large number of mental cases and border-line mental cases, that cannot be absolutely differentiated. The red blood corpuscle count, however, will oftentimes help to take the cases out of the neurasthenic class and place them in their proper divisions.

Physically, a case of increased red blood corpuscles presents several pronounced symptoms. In the first place, there is a marked congestion of all of the cutaneous surfaces with blood. When the patient lies down the face becomes quite markedly purple, the temporal vessels stand out very plain; the flushing extends over the scalp and through the hair. When the arms are allowed to hang at the side the veins stand out very prominently and the skin becomes quite purple. This same condition will be found generally throughout the body. The face usually has a swollen, heavy appearance. The mucous membranes in all parts are also markedly congested and purple. In many cases the eyes are very blood-shot. If the patient is caused to stoop over and to lift while stooping, the face will have almost the appearance as though he were going to have an apoplexy. The breath as a general rule is very offensive, the tongue is coated, the abdomen quite often filled with large quantities of fecal material or badly bloated. The urine as a general rule shows a slight trace of albumin and nearly always indican, and large amounts of calcium oxalates.

The mental symptoms are quite characteristic. In the first place the patient is stupid and dull, little given to talking, and only under pressure will he as a general rule tell you what he is worried about. His

orientation is good, he is considerably depressed, may have a fair amount of judgment, oftentimes being able to conduct his business satisfactorily, although he does not show any tendency to rapidity of thought or increased activity, going through the normal functions of life more as a matter of fact than anything else. When quizzed relative to his worry he will nearly always state that he fears he is suffering from some incurable disease.

Recently, when we had a number of these cases under observation at one time, it was very interesting to compare their disorders as they thought they were afflicted with them. One patient came, stating that he was sure he had the cholera, and when we proved conclusively to his satisfaction, by taking up the symptoms of cholera, which, by the way, he knew very well, that he could not have that disorder he rapidly changed to the belief that he had syphilis, and when we succeeded in eradicating this disorder from his mind, he instantly acquired a third one as serious as any other.

Another patient, owing to the fact that he had been circumcised late in life, and that the doctor who operated on him said that he had a slight weakness of one inguinal ring, was sure that he was going to be afflicted with hernia, and for that reason would never be able to have a family of his own. When we had disproven this to his own satisfaction, he was quite positive that he would never be sexually perfect owing to the fact that his father had had hernia.

A third patient had acquired syphilis, and by eating at the same table with the rest of his family had given it to all of them, but did not wish any one to know about it, as he intended to destroy the entire family before it could be found out.

Another patient, although only 18 years old, had termed himself as sexually imperfect, and had given up life entirely because he could never have a family of his own; and others presented just as peculiar ideas. All of them, however, seem to be along the line of disease. None of these cases were much worried about the future nor the past, excepting as it related to their conditions. None of them had many religious ideas, and only one or two had any intention of doing harm to themselves or others. Nearly all, after they had improved, stated that they had experienced either a severe headache at times or a markedly full feeling in the head, which only disappeared as they began to improve.

While a polycythaemia is so closely related to this peculiar form of mental aberration, it is more closely related to the prognosis of the case. In every case the improvement of the mental symptoms and the patient generally, has been associated directly with a diminution in the red blood corpuscle count. In fact this change has been so marked that we have come to state positively that the case was improving when the red blood corpuscle count diminished, and that when it would arise, the patient was getting ready for a recurrence. In nearly all instances a reduction of the red blood corpuscles has preceded the improvement, both mentally and physically, of the patient. In most instances it precedes the change in the other conditions by about one week. To illustrate, I will cite the following case:

A young man came to us suffering from what was supposed to be neurasthenia. He presented the physical symptoms before enumerated. His blood pressure was 110, there was a slight trace of albumin in the urine, a fair amount of indican, and his red blood corpuscle count was 6,080,000. At the end of a week's treatment the count had fallen close to 5,520,000. For some time it did not fluctuate one way or another to any great extent. Suddenly it dropped off to 5,248,000, and the statement was made to the patient's wife that he would be better within a short time. Within a few days he seemed clearer, brighter, more able to get around, and doubted very much whether or not he had had a syphilitic infection, with which idea he constantly worried before. Practically all of the mental symptoms subsided, and the patient was about ready to leave for home when he received word that his father had suffered an apoplectic stroke. After two weeks of worrying and much sleeplessness and restlessness, the count rose to 6,384,000. After several weeks more of treatment the count again dropped to nearly normal, and the

patient was discharged and ordered to report for examination. Two weeks later he reported for examination, and then the count was found to be an even 6,000,000. His wife stated that up to two days before returning he had been brighter and better than for years.

The patient himself was not told anything about the examination, owing to the fact that he seemed to be in a very good condition, but his wife was notified and told to report if any of his old symptoms appeared within the succeeding days. Four days later she reported that he was again worrying about himself. An appropriate line of home treatment was started, and within a few days his wife reported that his face was much whiter than formerly, and that all of his old ideas had disappeared.

Here the increased red blood count was an exact indicator of the individual's true condition, and a large number of cases could be cited where it bore this same relation. For this reason we feel that in a certain number of mental disorders, especially those presenting symptoms where the patient worries regarding his own health and has systematized delusions relative to some definite disease he has, that the condition of the blood stream has a very great bearing upon the mental disorder; and consequently efforts should be made not only to decrease the volume of the blood stream, but also its quality. We feel sure that an individual can have too rich a blood stream as well as too poor a one.

We also feel that while an increased red blood count is not always a disease per se, it is a very definite and prominent symptom in a large number of disorders, and the one above all others that must be treated.

—*The Sawyer Sanitarium.*

PUERPERAL ECLAMPSIA.

A. P. Butt, M.D., Davis, W. Va.

(Read at the Annual Meeting State Medical Ass'n July, 1912).

There is no place in the whole domain of medicine where chaos reigns supreme to a greater extent than in the symptom complex known as eclampsia.

It is unreasonable to expect any unanimity of opinion regarding its etiology and treatment when there is no such unanimity in regard to the very meaning of the word. One is reminded of insanity, for which the alienists tell us there has been no satisfactory definition yet coined. I note that DeLee in his year book heads the subject—"Toxemia of Pregnancy. Eclampsia." He gives as a definition: "Eclampsia is understood to be a toxic condition dependent primarily upon the development of a fetus, manifesting itself by general and renal symptoms."

Zweifel has termed eclampsia "the disease of theories."

Williams says eclampsia is a form of intoxication with whose nature we are as yet unacquainted.

Jacobson believes it is only a form of uremia due to nephritis.

Etiology.—Regarding this there seems to be no agreement whatever. I think I do not exaggerate when I say, that the entire time of this session might be taken up with a mere enumeration of the various theories that have been advanced. A mention of a very few will suffice. The placental theory, i. e., the entrance of placental cells into the circulation; an abnormality of the glands of internal secretion, especially the thyroid; the infectious theory has been advanced by Stroganoff. There is nothing strange about the advancement of the infectious theory. Practically everything else has been attributed to infection, why not eclampsia? Those who affirm it have this advantage—no one can at present deny the affirmation. Meteorological conditions have been advanced as a cause of eclampsia by a noted obstetrician. This idea is, it seems to me, somewhat akin to the ideas our forefathers had concerning the influence of the moon on butchering, roofing and planting of crops. The treatment has, I think, progressed but little if any, certainly none within the last twenty years. Now, as always, there are those who cry out, "lo here, and lo there," claiming wonderful results for their favorite treatment. Unfortunately this treatment falls flat under the relentless judgment of time.

Some bleed, some do not; some advocate morphine as a life-saving measure, others write eloquently of its dangers; some use

chloroform, others tell of deaths due to liver necrosis following its use. Even in the all important question as to whether to deliver or not there is absolutely no unanimity of opinion. Just to think that all the years from Hippocrates to the present have not taught us whether it is better to deliver the woman or bide our (her) time. Just at present the pendulum seems to me to be swinging towards a waiting policy. B. C. Hirst, with his very large experience, advises that nothing be done towards producing labor other than puncturing the membranes.

DeLee seems to be weakening. In his Year Book for 1910, he says: "It seems to be more and more certain that in eclampsia immediate delivery is the best treatment." This year we find him saying: "Immediate delivery offers the best chance for mother and child, but only in the hands of the experienced, surgically-trained obstetrician." In the hands of others he advises morphin, veratrum, rupture of the bag of waters, introduction of colpeurynter, and asserts that with this line of treatment "the results will not be far behind those gotten by radical interference."

Stroganoff of St. Petersburg, is claiming a wonderful drop in mortality by a treatment, the main features of which appear to me to be narcotizing the patient with morphin, chloroform and rectal injections of chloral. I note he says: "At the end of the first day one can count on a final relief from convulsions."

This may be satisfactory in the charity wards of a Russian hospital, but I should dislike to tell the friends of my patient that the convulsions would stop at the end of twenty-four hours.

We are hearing from more than one source something like this: "The dictum, assist in labor but do not induce it, or treat the convulsion and let the pregnancy take care of itself," is better than "empty the uterus in every case of convulsions no matter what the period of gestation."

To offset these opinions, I heard Deaver at the last meeting of the A. M. A., advising hysterotomy for eclamsia, and many other obstetric conditions.

Note how much of the treatment advocated is directed at the convulsions and not at the underlying trouble. Likely there are occasional cases that might go on to a fatal ending, due almost entirely to the convulsions, but I think they must be rare. It seems to me the convulsion bears about the same relation to the underlying cause that the growl does to the bite of the dog. I venture the assertion that no treatment that is directed at the convulsion alone will ever be satisfactory.

After this brief summary of the uncertainties of eclampsia, I think you will bear with me when I say that no matter what any of us do, or refrain from doing, in the way of treatment of this terrible affliction, we can in all probability back it up by a host of others who have done likewise. In other words, one man sees as far into a mill stone as another.

The only case of which I have read, in which direct transfusion was practiced, is Newell's. (I). In Newell's case the blood was allowed to run for an hour. He states, however, that in the first half hour it did not run properly, and that more was given than was necessary.

The lumbar puncture was done at the suggestion of my assistant, Dr. W. B. Sager, who had recently read of its being used by Bataska in three cases. In Bataska's cases 35 c. c. was withdrawn from the first case, from the second 25, from the third 20. In no case was there a convulsion afterwards. In all of these three cases Bataska states that the fluid was under considerable pressure.

In my case the fluid was under low pressure. Ana Gotinski, age 25, mother of three children, two of whom had been delivered with forceps. The patient's mother had died of puerperal mania. The account of her death by the son-in-law is so interesting that I cannot forego giving it.

He stated that she was confined in a room by nailing boards over the windows and doors, food being handed her through a hole cut in a door. "Six weeks finish," is the way he described the result. My patient had been insane on two occasions, her husband stated. Once she had left her home during a winter night; was tracked in the snow and found crouching behind a wall. On another occasion she had thrown herself in front of a train. This may have been

hysteria instead of insanity, as on both occasions she was given a good beating by her husband, after which she recovered.

I saw this woman on May 12th, about 6 o'clock a. m. She was in a convulsion then, this being her third. I directed that she be brought to the hospital at once. When she arrived she was bleeding from the mouth, and I was informed that she had had another convulsion on the way. She was taken immediately to the operating room and placed on the table. Another convulsion occurred while this was being done. Examination showed the cervix dilated but the head not engaged.

Five ounces of a very thick, dark urine was withdrawn per catheter. Chloroform was given and high forceps applied. The child was safely delivered and required some efforts toward resuscitation, but not a great deal. There was considerable hemorrhage, so much that I felt obliged to administer ergot, though I believe it to be contraindicated in this condition.

At 8:30 another convulsion, at ten resting quiet. 15 grains of diuretin and 1 ounce of magnesium sulphate were given. At 5:30 and 7:30 she had convulsions lasting two minutes. Immediately after the one at 7:30, she was placed on the operating table and a transfusion from her husband's radial artery to her brachial vein was done by Brewer's method. The blood was allowed to run ten minutes, the vein was then ligatured and the hole in the artery sutured. I am aware that it is customary to ligature both artery and vein, but I saw no reason why suturing would not be better.

About three-fourths hour after the transfusion 1-10 gr. pilocarpine was given, with the result that a profuse perspiration followed. Two hours after the transfusion she had another convulsion. Immediately after this I withdrew 24 c. c. of spinal fluid by lumbar puncture. There were no other convulsions. During the first twenty-four hours 15 grains of diuretin had been given on three occasions at four hour intervals. During the second twenty-four hours she passed 25 ounces of urine, which was all the time becoming clearer and containing less albumin.

On the fourth and fifth days she insisted on sitting up in bed, was entirely rational and anxious to return to her home and children. Her husband asked that he be allowed to take her home.

On the fifth night at 9 o'clock, she became maniacal and never regained her reason. She fought, screamed, laughed and sang. Had to be strapped to her bed.

On the ninth day parotitis developed on the right side. On the fourteenth day an incision was made and a small amount of pus liberated. After a couple of days the pus ran freely. On the 18th day death occurred from pneumonia. A partial necropsy was secured. The pelvic organs were entirely normal as far as a gross examination could show. The lungs show a double pneumonia.

Conclusion—Practically nothing is known of the etiology of eclampsia; in fact we do not know what eclampsia is.

The treatment is in a most unsatisfactory condition. Blood transfusion seems to have little to commend it based on our usual conception of this malady. Let us not forget that "our usual conception of this malady" has never gotten us very far.

Lumbar puncture would seem to have little to commend it in the treatment of the intoxication, but might have a field of usefulness in the control of the convulsions.

For myself, I expect to continue to perform immediate delivery under all ordinary circumstances. This being ineffectual, will follow with lumbar puncture; this being ineffectual, with transfusion. In the meantime will not neglect eliminative treatment via skin, kidneys and bowel.

(1) Year Book Practical Med. Series. 10 from Boston Med. & Surgical Journal, Feb. 17th, 1910.

Discussion.—DR. JUDY—Since auto-intoxication is undoubtedly the cause of convulsions, we should look out for the causes of toxemia during the period of pregnancy. Most cases could be avoided if the doctor could know the patient's condition several months before time of confinement.

DR. SHARP.—I should like to give a brief statement of a case or two. Mrs. H., primipara, expected labor June 1. On May 7, visited her and had urine examined. Examined urine again on the 10th. Found no albumen. On the 14th called was complaining of nausea, found her much bloated and urine showed much albumen. Sent her to the hospital. On the 16th there was so much albumen that I asked Dr. C. to see her with me. Headache. That afternoon was called,

she had her first convulsion, Dr. C. and I in attendance. Three convulsions, severe pains in forehead. Hot pack, to cause free diaphoresis, which it did. Chloroform to control convulsions, chloral and soda with saline solution by rectum. As pulse was 130 to 140 and tense, gave Tinc. Veratrum every 4 hours, salines to purge freely; watched her carefully. The veratrum reduced pulse to 60 and kept it there. Some appearance of labor. Head in l. o. a. position, os dilatable. Gave acetate of potash and sweet spirits of nitre freely, continued the veratrum five days, the symptoms of labor passed over and the amount of albumen gradually diminished. The urine had a reddish tinge due to broken down blood corpuscles. Labor came on June 13 and she was safely delivered of a 7½ lb. son, aided by forceps, after which convalescence progressed slowly—is now convalescent.

First case I ever had was bled freely, 13 convulsions at term; had to go 9 miles, gave chloroform and delivered as rapidly as possible.

DR. RODGERS—Either physicians or the laity are to blame in these cases. If the people would notify the physician in time and the physician then did his duty there would be no cases of eclampsia to discuss. The diagnosis is always made too late. The women ought to be under observation months before her expected time of confinement. When blood pressure runs no higher than 140 no cases of eclampsia occur.

DR. LIND.—Related case which was delivered by an old physician at 7th month, by dilating os with hand without even washing his hands. Woman and child both lived through the ordeal, but the woman lay in a semi-comatose condition for 16 days and had photophobia, would scream at the top of her voice when light fell on her face.

DR. JEPSON.—Desired to confirm Dr. Judy's remarks concerning auto-intoxication. All pregnant women should be under the care of the physician during pregnancy, that the earliest symptom of toxemia may be observed and remedies applied. No doubt many cases of eclampsia might thus be avoided, but not all. Women need to be educated to the necessity of early reporting their pregnancy to their medical adviser.

OBSERVATIONS OF A GENERAL PRACTITIONER UPON ENTERING INSTITUTIONAL WORK.

Chas. A. Barlow, M.D., Spencer, W. Va., Supt. Second Hospital for the Insane.

(Read before the W. Va. Medical Society at Webster Springs)

After fifteen years in general practice, I was rather suddenly seized with the idea that I wanted to change to Institutional work, and within a few days I had charge of the Second Hospital for the Insane. Having had a fair experience on the outside, it was quite natural for me to make some observations upon entering a new field.

My first observation was that the general practitioner is not as well trained in nervous and mental diseases as he should be. The subject is not properly taught in the Medical Schools, and the physicians come out with a very superficial knowledge of a class of diseases which is rapidly increasing, and a class which is doing much to injure our citizenship. A clearer understanding of this subject should be had by the medical profession at large; not so much for the purpose of treating the diseases but for their prevention. Each year we are devoting considerable time and study in our efforts to eradicate tuberculosis and like diseases, yet insanity is increasing more rapidly than most of them, and our profession is doing little, as a whole, towards its eradication.

The man who enters Institutional work finds hundreds of cases of insanity and begins to study them, and at once discerns the weakness of general practitioners, and the necessity of their aid in the lessening of this dreaded disease. We realize that it is impossible for the general practitioner to master the subject, in all its complexities, yet he should have a better knowledge of it than he has at present.

In soliciting your aid in this great work, we will take up briefly some of the more important features in the study of insanity. We find a wide variance in the classification of the different forms, and some authors claim it cannot be classified. At the present time, Kraepelin's classification is the one most used.

Kraepelin's grouping is based on the principle that it is connected with the origin, development and termination of disease, every factor considered. We think his classification very mystifying, and for general purposes it is safe to have two forms—those of the diseased brain and those of the defective brain. The former includes the brain which had developed normally for years,and had fallen prey to disease; the latter that affected by congenital defect, or defect acquired through

words we would divide them into insane proper and idiots. Idiocy comprises three degrees of mental impairment, profound idiocy, moderate defect or imbecility, and nerve weakness of the mind or feeble-mindedness.

It is almost impossible to get accurate statistics as to the number of insane or feeble-minded, for reasons which we will not take time to explain. From what we have at hand I will give some excerpts. In 1900 it was estimated that one in every five hundred of the general population was feeble-minded, and at the present time Dr. Frantz, of the Government Hospital, at Washington, D. C., who has given considerable study to this subject, claims that one in every three hundred of the general population is feeble-minded. You will note that there is a rapid increase, unless there was some error in the early estimate. We further learn from the statistics given in several States, that in some of them the number has doubled in one generation.

It is further claimed that insanity has increased 300% in the past fifty years, while our general population has only increased 138%. In thirty years the insane in West Virginia have increased from 491 to 2,593, or 500%, while the population barely doubled in the same period. This comparison is not reliable, owing to the incomplete records kept prior to 1880. However, to make this brief, we can safely say that insanity is increasing at an alarming rate, and some drastic steps must be taken by our lawmakers, aided by the medical profession, looking to a betterment of this condition.

In the consideration of the etiology of insanity, I will only take up heredity, as I notice Dr. Bloss has a paper covering that part of the subject. However, I will ask that you give his paper your careful attention, as it is by noting the causes that you can assist us most. Heredity is very aptly covered by F. W. Mott, who studied the pedigrees of a number of cases in the London County Asylums. His conclusions are formulated as follows:

1. "Hereditary predisposition is the most important factor in the production of insanity, imbecility and epilepsy. It is the tendency to nervous and mental disease, generally speaking, which is inherited. This may be termed the neuropathic taint.

2. Education, sanitation and the rest, as Bateson has stated, are only the giving or withholding of opportunity for good or ill.

3. Alcohol is a powerful coefficient, but not of itself the main cause, in the production of insanity, except in the rather infrequent cases of alcoholic dementia.

4. Certain types of insanity may be transmitted with greater frequency than others. This has been termed similar herdity. The types are: Periodic insanity (also termed "manic-depressive"), delusional insanity, or epilepsy. The general rule, however, is for a different type to appear.

5. Mothers transmit insanity and epilepsy with much greater frequency than do fathers, and the transmission is especially to the daughters.

6. Anticipation or antedating is the rule whereby the offspring suffers at a much earlier stage than the parent; more than one-half of the insane offspring of insane parents are congenital idiots or imbeciles, or have their first attack in the period of adolescence. This adolescent insanity may take an incurable form of dementia in a large number of cases; in others it is frequently with or without imbecility. Very rarely does the parent become insane before the offspring. This is a strong argument for heredity transmission, possibly hereditary transmission of an acquired character.

7. Regression to the normal average may be (1) by marriage into sound stocks, or (2) by anticipation or antedating leading to congenital or adolescent mental disease terminating the perpetuation of the unsound elements of the stock.

8. High-grade imbeciles who are not at present in any way checked in procreating, owing to social conditions interfering with survival of the fittest, together with chronic drunkards, neurasthenics, and neuropaths, are continually reinforcing and providing fresh tainted stocks.

9. Recurrent insanity, owing to the fact that patients are not segregated for any length of time, is probably the most potent cause of insane inheritance. Facts tend

to support the opinion that the recurrent types of insanity during lucid intervals may breed a stock of potential lunatics and paupers.

10. Nature is always striving to go back to the normal average and only relatively few of a stock are insane. A stock with a streak of insanity when combined with genius is not bad, and the same may be applied to a nation; but we only want a streak of genius and insanity; the great body of the nation should be of good normal average, for that nation will possess the greatest potential virility in the struggle for existence that can breed from the greatest number of men and women with bodily health who possess a large measure of the three attributes of civic worth, viz.: courage, honesty and common sense, combined with parentage, pride of family and pride of race.

We have observed many interesting things among the symptoms of insanity, but will not tire you by giving them here. To give our observations in the treatment of the insane would require considerable time. Therefore, we will ask your indulgence for a brief account only.

In ancient times the insane were believed to be possessed of the devil and accursed. They were whipped, chained in dungeons, tortured, and sometimes burned. In fact many of these barbaric methods were used after it developed that insanity was a disease, and it has only been a few years since the most humane methods have been in use. Many people today who are unfamiliar with our methods of handling the insane, believe our asylums are horrible places, and are really surprised when they visit them to discover they are real hospitals. The depressing, barren halls and cells have given away to pleasantly furnished and carpeted halls and bed rooms. Muffs, chains, straight jackets and the many varied forms of restraining machinery have disappeared. Patients have the liberty of the wards, and many of them are occupied in employment, amusement and exercise. The old, deadly monotony is broken. The weak or unsound mind is controlled and governed by the trained, sound one.

The general practitioner should avail himself of every opportunity to visit our state institutions so he can assure his patrons that their relatives will be well cared for, and that it is just as necessary that they be confined in an asylum as it is that major surgical operations be done in a hospital. They should be shown the value of discipline, regularity in sleep, eating and exercise, along with well directed medical treatment. The public should be made familiar with the advantage of employment given the insane, or rather the reeducating of the lunatics. If you have ever witnessed many of the insane going about their work, and observed how happy and contented they are, you would not want to shut them up in solitude again. The sane or the insane man, subject to exceptions, must have something to do. In the case of the insane, it must be simple, regular and of short duration, but continuous day after day; then it is that he comes to act through habit. "Habit is a cable; we weave of it every day; at last we cannot break it." In the use of drugs we cannot expect much, except to keep the patients strong physically.

Some have asked about the results of salvarsan in paresis and other diseases caused by syphilis; to them we regret to say the results are not very favorable, owing to the very limited number of psychoses of any form being due to recent inflammatory exudations. In old sclerotic, destructive and degenerative cases its use cannot be expected to restore lost tissue. The best results to be obtained can be secured through prophylaxis, which can only be secured through the aid of our law makers and the medical profession.

Two methods can be employed to secure this end: One is to prevent the production of more defectives, and the other is to segregate and give custodial care to those already in existence. The greatest asset of the state is a healthy, normal citizen. Laws should be enacted calling for stricter qualifications for those who enter matrimony. Bar the insane, mental defectives, chronic alcoholics, syphilitics, etc. Laws should be enacted requiring epileptics, imbeciles, habitual criminals, and persons suffering from recurrent and incurable forms of insanity, to be sterilized. This may seem a little advanced, but when you

come to consider the simplicity of the operation and the great advantage to society, it is bound to appeal to the better judgment of our law makers. I can cite you to several cases of recurrent mania which have been discharged at different times from this institution, and from the beginning of the insanity up to the present time they have become the parents of several children, who sooner or later will become a burden to our state, which likewise can be said of their progeny.

While heredity is the chief cause of insanity, there are other causes of which the laity should be informed. Alcohol, drugs, syphilis, improper living and other preventable causes contribute cases to our asylums. Our people should be taught to live better and avoid those things which produce insanity. Every endeavor should be made to segregate the insane and feeble-minded. The segregation of a single case today may save one hundred in the future.

In conclusion I will say, that our state laws in regard to the insane are contradictory and not up to the standard. If time would permit, I would cite you many changes which should be made.

We ask your cooperation in securing a better condition of affairs in regard to the insane, and extend to you a cordial invitation to visit our institution. Every department is open for your inspection, and we always feel honored by the visit of one of our fraternity.

NEED OF UNIVERSITY STUDENTS TO STUDY MAN.

Editor W. Va. Medical Journal:

MY DEAR SIR:—If I were able, I should be glad to write to every University student who is interested in the scientific and sociologic study of man, especially criminal, pauper and defective men. I trust therefore, you will publish this letter, and I request each student to regard it as a personal letter to himself, whom I shall be pleased to help all I can, should he desire to devote his life to the fundamental study of social pathology.

I appeal to University students to direct their attention more to the scientific study of humanity. It is a cry to "Come over into Macedonia and help us." Let the University encourage students more to take up these subjects which have been so long neglected and in which there are great opportunities to aid humanity, directly, by scientific investigation of the causes of crime, pauperism and defectiveness, in order to prevent and lessen them through knowledge gained by first-hand study of the individuals themselves.

When a student chooses for his life work, a subject in the older branches of knowledge, as physics, philosophy, philology, Greek, Latin and natural history, he finds the field somewhat well developed; but not so in more recent sociological lines of research, as criminal anthropology (criminology, a shorter term), and other cognate subjects, in which there is full opportunity for mental acumen and scientific ability of the highest character, to carry out most lofty purposes.

The question may arise as to what course of study will prepare one best for such work. I would suggest the following:

1st. A two years course in psychology, especially laboratory work.

2nd. Medical studies to the extent of anatomy, physiology, general pathology, nervous disease and insanity (especially clinical studies).

3rd. A practical course in craniology in the laboratory.

4th. Facility in reading modern languages, especially German and French.

Thus social pathology, especially criminal anthropology, one of its branches, requires more extensive preliminary training than most subjects, for it involves the investigation of man both mentally and physically. Such training is synthetic, which in this age of specialism is much needed. As such education is relatively new and experience in it as yet limited, it is difficult to designate a preparatory course. I have myself followed the course of study just indicated, but more extensively especially in medical lines, but such additional preparation might not be practicable for most students.

I have a leaflet entitled "Study of Man," which explains the work more fully, and I shall be glad to mail it to any student, gratis, who will send me his address. As I have said in this leaflet, "Criminals, paupers, mattoids, and other defectives are social bacilli, which require as thorough scientific investigation as the bacilli of physical diseases."

I beg leave to remain,

Most faithfully,

ARTHUR MACDONALD.

"The Congressional,"
Washington, D. C., Jan. 21, 1912.

CHILD BEARING WITHOUT MENSTRUATION.

Dr. O. F. Blankingship (J. A. M. A., Feb. 24) reports the case of a woman who has had three children but has never had the least sign of menstruation at any time. She was married at the age of thirteen and at that time weighed 180 pounds. The first child was born ten months, after marriage. The patient has a sister who has been married three times and had eight children without ever having menstruated. The mother and two other sisters are normal.

Abstracts

POSTOPERATIVE TREATMENT.

C. S. White, M.D., Washington, D. C. (Va. Semi-Monthly).

The average graduate has little knowledge of postoperative treatment. Medical teachers have been much to blame for this. The tendency to exploit a rare and difficult operation or the ingenuity of the operator, has subjugated the question of after treatment. Poor after treatment has often discounted the best surgical diagnosis and mechanical ability. The author compares after treatment to a firearm, not often needed but when needed the best is not too good. Vomiting is one of the symptoms to be combated. Chloroform causes less gastric disturbances than ether, but there is a wholesome fear of sudden death. Ether by the drop method with a towel about the cone produces the minimum reaction. Post-operative gastric lavage is of positive value in preventing vomiting. Proper diet is of greatest importance. Food is not restricted early enough by most surgeons. Digestion requires more time than most of us think. Vomiting may assume serious proportions and prove fatal. Food should be withheld at least 12 hours, and 24 is better. When vomiting has not been successfully combated, the usual resort is rectal feeding. New foods are well borne. fats and sugars poorly, proteids faily well. Inunctions of oils are of no value, and hypodermic injections of oil are unjustifiable. Constipation is the rule after an anaesthetic, especially for a short time, and purgatives are of little avail for the first 24 hours. We need a safe, reliable purgative which may be given hypodermically. Gas accumulation within the bowel is a source of great concern. One of the causes of this is food undigested in the intestines when the operation is done. "Not a few operations the performance of and the recovery from which have to be compressed within a few hurried days, would better not be performed at all." In the author's experience eserin sulphate or salicylate, gr, 1-30 to 1-40, with an enema of turpentine, glycerin and epsom salts, or the alum enema, has been most efficacious.

The lactic acid bacillus in compressed tablets, several weeks before an operation, with the idea of reducing the gas-producing organisms, would seem rational where time can be had. Voluntary emptying of the bladder is often impossible within a day, or even several days after operations. It is perfectly safe to allow longer than the usual eight hours before catheterization, and often desirable, for the quantity of urine will often act as a stimulant. Hot water bags over the pubes, a slight aid and turning the face downward in bed often help. There is always some risk of bladder infection in catherizing.

Pain of the excruciating, unbearable character will increase shock, and a little opium, even if it increase constipation, should be used. Belledonna, hyoscyamus and chloral do not replace it. Opiates do not increase constipation as much as is often thought.

Thirst is one of the most distressing symptoms to be met. Of course, but little water can be given while vomiting lasts, and cracked ice does not relieve thirst. Water by the rectum has some effect.

The posture may help to diminish the danger of hemorrhage, and often a patient is kept too long on the back when careful turning would do no harm. Several well known operators allow their laparotomy patients to get out of bed in two or three days, while others keep them in bed three weeks. "Who can say that this man is wrong and that one is right, when the ultimate results are practically identical?"

Stimulants are abused in operative cases. "The motto seems to be, when in doubt, stimulate!" The best single drug is strychnia. Camphor, ammonia and coffee may be of some value. The writer can recall only three cases in the past year where he found stimulants necessary. The recovery room should be as close to the operating room as possible without being contaminated by odors or the patient annoyed by sounds. It should be quiet and in charge of a nurse who devotes her entire time to the care of the patient for at least 12 hours. The room

should be well equipped with all apparatus for prompt treatment that may be necessary the first 48 hours. G. D. L.

AUTHOR'S ABSTRACT.

THE PRACTICAL IMPORT OF RECENT WORK ON HYSTERIA. (J. A. M. A. Dec. 21st, 1912).

By Tom A. Williams, M.C., C.M., Edin.
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of Paris.

A hysterical symptom is merely one produced by suggestion. Hence the disorder is a purely psychogenetic one. The stigmata, moreover, do not occur in the absence of medical examinations or other sources of suggestion. This is readily observed in simple cases, which are frequent, and may be ascertained by a profound analysis in nearly all.

Trophic symptoms and hyperthermia are products of somatic disorder such as hyperthyroidism or latent infection, or they may be the artefacts of malingerers, and in neither case are they hysterical. Nor is emotivity hysteria.

THE GENETIC IDEA from which springs the hysterical symptom must be sought in order to make therapeusis satisfactory. Any success of mere suggestive therapy is only temporary, and rather favors relapses by increasing proneness to further suggestions of all kinds. Rational enlightenment of the patient into the mechanism of his systems is the key to success. Isolation as a means to this end is rarely required. Physical measures are a disadvantage unless specially indicated, as they divert attention from the real aim, which is psychotherapy. This should inculcate principles rather than details. But the minutiae of a psychomotor discipline need to be carefully shown to the patient and attendant. Cases illustrate these points. See also *Medical Annals*, Jan. 1912.

1705 N. St.

Selections

FREQUENCY OF URINATION IN THE ADULT: ITS SIGNIFICANCE AND TREATMENT.

Frequency of urination is a term applied to a decided increase in the number of times that micturition is initiated, though the amount of urine passed each time may vary from a few drachms to enormous quantities. When the latter is the case, the term polyuria is more applicable. The term diuresis, on the other hand, is limited to an increase in frequency and amount of urine when induced by artificial means. In order to alleviate this most troublesome symptom, its etiological factor must be determined.

The history of the patient having been accurately obtained, it is of great importance that the urine should be fully examined chemically and microscopically. The total quantity of urine passed daily should be noted, as well as its specific gravity. By distending the bladder with a mild antiseptic fluid until fullness is complained of, some idea may be obtained as to the size of the bladder and the strength of the vesical sphincter. In the male, the size of the stream; the force with which it is ejected; the interruption or the sudden stoppage of the stream, all give important clues as to the site of the trouble.

Frequent urination associated with the passage of large quantities of urine (polyuria), occurs in diabetes mellitus, diabetes insipidus, and phosphatic diabetes. It also occurs in chronic Bright's disease, hysteria and occasionally in cerebral disease, especially brain tumor. The urinary and clinical findings serve to differentiate these conditions and suggest the proper treatment to be carried out.

Temporary conditions associated with the frequent passage of urine in large quantities are usually the result of diuresis produced by the ingestion of certain liquid and solid foods such as asparagus, gin, and coffee.

Frequent micturition associated with the passage of small quantities of urine occurs in great number of conditions. Pain,

scalding, and other disagreeable sensations may be complained of simultaneously. Of the extra-vesical conditions giving rise to frequency, may be mentioned a beginning tuberculosis of the kidney. Concretions in the kidney and pelves, which lie latent, may occasion frequency of micturition. Reflexly, hemorrhoids, anal fissures and urethal caruncles cause a frequent desire to urinate. Vesical calculus, and small tumors situated near the trigonum and neck of the bladder are the most frequent causes of frequent urination arising in the bladder itself. These latter conditions can only be determined by cystoscopy, the X-ray and other methods of locating foreign bodies in the bladder, and are dealt with accordingly, when found. A not unusual initial symptom of tabes dorsalis, is frequent urination; this should not be overlooked.

In the male chronic hypertrophy of the prostate, chronic prostatitis and urethro-cystitis, stricture of the urethra and a small meatus all give rise to frequency of urination. In prostatic hypertrophy, when the frequency is due to an overflow of the retained urine and where the diagnosis has not been made early enough to warrant a radical operation, the patient should be taught the use of the catheter, which he can employ several times daily. Soft strictures should be periodically dilated with sounds. Chronic urethro-cystitis is best treated by means of instillations of silver nitrate (1 :2000 to 1 :500), a few drops of which may be injected every 3 or 4 days until relief is obtained.

In the female, additional causes for frequent urination are found. An enlarged and anteflexed uterus resting on the bladder is often the cause of frequency. The chronic endometritis which exists, and the malposition must be corrected before relief is obtained. In a like manner an enlarged and retroverted uterus with adhesions giving rise to frequency, must be replaced. Occasionally frequency of urination is the result of a parametritis with adhesions to the bladder; when soft and recent, these adhesions may sometimes be stretched by means of uterine massage and patient tamponage of the vagina in the knee-chest position. Cystoceles, abdominal tumors and growths of the adnexa exerting pressure on the bladder are dealt with surgically.

When none of the above enumerated etiological factors can be found, the condition must be regarded as of neurotic origin. Such patients require proper hygienic and tonic treatment. In this manner the lost tone of the musculature of the bladder will likewise be benefitted. Cold sponges, with friction, proper food and rest in the open air should be advised. The bowels should be evacuated daily so that no pressure is exerted on the irritable bladder from below. The intake of fluids should be restricted especially for those patients who arise frequently during the night to urinate; no fluids should be taken by these patients later than two hours before retiring.

The drugs that are of most use in reducing the frequency of urination, belong to the belladona group. The extract of hyoscyamus in doses of 4-6 grains daily with or without ergot (ergotin, styptol, etc.), may be of use. In hysterical cases asafetida may be added in doses of 5 grains, given three times daily. In the cases of so-called irritable bladder the use of rectal suppositories often gives better results than medication by mouth. A useful suppository is the following:

℞ Extr. belladonna 3
Codeinae
Extr. nucis vomicae aa gr. ss
Oi theobrom q. s.
M. et f. suppositor. Sig: one at bedtime; one before arising.

Highly concentrated urine in an irritable bladder occasionally gives rise to frequency of urination. Attention to the diet, and possibly the use of alkalinics to reduce the hyper-acidity of the urine may be of benefit.—*Med. Review of Reviews.*

THE VALUE OF VACCINE VIRUS IN GOUTY, RHEUMATIC AND OTHER PAINFUL CONDITIONS.

Heinrich Stern, Ph.D., M.D., New York.

Since the publication of my preliminary report on the analgesic property of vaccinal inoculation, I had a large and varied experience with this protective agent in the

treatment of painful conditions of diverse origin.

I am at the present day more than ever convinced that the inoculation of vaccine virus into an individual exhibiting gouty, rheumatic, neuralgic, neuritic or angiosclerotic manifestations, will frequently disperse the accompanying pain, and, in many instances, will exert a beneficial influence upon the affection itself.

Inoculation of cowpox lymph will often allay pain, when all other therapeutic measures have significantly failed. It may confer protection against pain exacerbations for very long periods; some of the patients inoculated eight or nine years ago have not missed a single day from business since. In other instances, the protection afforded is more limited either in duration or quality, or in both. Paroxysms of pain may recur within a few days or some months after successful vaccination, or the pains may not become entirely subdued, but may continue or return in a more or less modified, that is, milder degree.

In my first report on this subject, which was based upon ten clinical and two experimental observations, I was unable to foresee the wide range of affections accompanied by pain, in which inoculation of vaccine virus would often be followed by speedy and lasting relief. I cite the following case:

H. Van A., 55 years old, was seen in consultation with Dr. A. R. Carman of New York City, at the end of December, 1907. The patient had been unable to move about for the past three months, having been affected with persistent painful induration of the walls of the veins of the right leg. For some time previous he had rigors every second or third day, which were followed by profuse sweats. The temperature has been as high as 103.5 deg. F., at the time of my examination it did not exceed 100 deg. F. The pains, according to the patient's description, seemed to be diffuse; the examination, however, revealed that the tenderness was much greater along the course of the affected veins, which showed considerable periphlebitic thickening. There appeared to be some involvement of the lymph vessels.

In spite of rest in the recumbent position, mechanical supports, and a great variety of local and general sedatives, no improvement could be noted after nearly three months of treatment. Inoculation of vaccine virus into a slightly affected portion of the thigh was proposed by me and executed by Dr. Carman. One week after the inoculation the phlebitic state with all its concomitants, including the pains, had entirely disappeared. *The patient has been well ever since.*

In this instance, vaccinal inoculation was solely suggested for one purpose, namely, the alleviation of the persistent pains. That the pain-producing morbid state itself would be subdued by the vaccine had not the object of my thought, in fact, I considered the synchronous cessation of the phlebitic process a mere accidental occurrence until subsequent, though limited, experience taught me that this procedure, even if it be not an infallible method, is a valuable one by which subchronic or chronic forms of phlebitis can be ameliorated.

It is also not improbable that vaccinal inoculation exerts a curative influence upon other pathological states, the chief symptom of which—from the patient's point of view—is the pain. However, it would be premature to dwell at this time upon the rationale of vaccine inoculation in the treatment of the various functional and organic disturbances; I confine myself to point out the analgesic and sedative value of this mode of treatment.

It has become a matter of routine with me to recommend vaccinal inoculation in all those instances of persistent muscular and articular pains, irrespective of the presence or absence of local manifestations, which have not yielded to the continued application of the more commonly employed therapeutic measures. I have never made use of the vaccine virus for the amelioration of the pains of an acute condition like rheumatic fever, but on no occasion have I hesitated to utilize it when the process underlying the pains appeared to be subacute, or chronic in character. I see, however, no objection to vaccinal inoculation in the presence of fever, nor would an intercurrent disease like bronchitis, gastroenteritis, etc., prevent me from applying the virus, if I thought that I could arrest a patient's suffering. Inoculation of glycerinized animal vaccine is always a

harmless procedure, except, perhaps, in the presence of certain skin lesions in which there exists a possibility of autoinoculation.

A successful vaccination does not necessarily depend upon the appearance of a local lesion, that is, immunizing substances may be produced in the organism in the absence of a vaccinal eruption; nevertheless, I inoculate in close proximity to the painful area, and it is my experience that, the more pronounced the ensuing cutaneous eruption at the point or points of inoculation, the more manifest will be the analgesic effort of the virus. It is my endeavor to obtain a somewhat diffuse eruption, and frequently the virus is inserted at more than one point in or near the affected region.

Rastus: "What yo' tink is de mattah wif me doctah?" Doctor: "Oh, nothing but the chicken-pox, I guess." Rastus (getting nervous): "I 'clare on mah honah, doctor, I ain't been nowhar I could ketch dat!"—*Medical Times.*

HEXAMETHYLENAMIN IN RESPIRATORY DISEASES.

From a review of recent literature on this subject by William B. Chamberlain of St. Louis (*Interstate Medical Journal*) we extract the following:

Literature on the use of hexamethylenamin in the upper air-passages is at present rather scanty, but enough has been written from careful observation to show that here too it has had a decidedly beneficial action, and to suggest its use more frequently in such affections. Its use in acute and chronic sinus affections is in most cases but briefly alluded to, but more extended reports are given in regard to bronchial and pulmonary conditions.

The usual dose is 7½ gr., three or four times daily, but 75 gr. per day have been given with no untoward results. Individuals seem capable often of withstanding enormous doses without the appearance of toxic symptoms, while Frothingham mentions the administration to a guinea-pig of "375 gr. in eight doses during nine days." Toxic symptoms are those of "gastric irritation, some abdominal pain, some pain in the back denoting kidney congestion, excessive irritability of the bladder with strangury, and possibly some hematuria or hemoglobinuria. There may also be, from the intestinal irritation, an eruption of the skin, urticarial in character." In those who seem to possess special idiosyncrasy, gastric, irritation is readily caused, and albumin, casts, and a small amount of blood may appear in the urine. "In ordinary cases, however, hexamethylenamin will rarely cause an albuminuria unless some involvement of the kidneys is already present."

The most recent report of its use in affections of the upper air-passages is that of Eisenberg, who used it in a total of 43 cases with exceedingly gratifying results. His opportunities for careful observation seem to have been exceptionally favorable with children and employes in the Lower Brule Indian School; so that the report deserves careful consideration and warrants the further use and observation of the drug in this class of cases. Of the 43 cases treated, 22 were of acute bronchitis, 12 acute rhinitis, 8 influenza of the respiratory type, and 1 chronic frontal sinusitis. Eisenberg's dosage of the drug seems to be somewhat less than that usually employed, and is given as follows: In acute rhinitis 4 gr. three times daily in half a glass of water for children up to ten years, twice daily for the following day or so. For children up to fifteen years, the dosage is 6 gr. and for adults 10 gr., given in the same manner. In acute bronchitis the patients were kept in bed while the temperature was above normal, and 10 gr. of hexamethylenamin were given three times daily for three days, then twice daily until the subsidence of cough. All were well in four to five days. Children were given correspondingly smaller doses. In influenza the patients were, of course, placed in bed during elevation of temperature, and 10 gr. were administered three times daily until the temperature was below 100 degrees F., then half doses three times daily until the temperature became normal. With accessory sinus disease his experience is limited to one case where it seems to have exerted a favorable action. Eisenberg's conclusions are as follows: "(1) Hexamethylenamin is a valuable remedy in the treatment of inflammatory conditions of the upper respiratory tract. (2) It must be given in doses large enough to secure its full physiological effect. (3) No untoward symptoms were observed while

given in fairly large doses (up to 30 gr. daily). (4) It seems to prevent possible complications of acute rhinitis, such as bronchitis and sinusitis."

Vanderhoff mentions a daily dose of 15-25 gr., and adds that 75 gr. daily have been administered without untoward results. His daily dose was 10 gr. four times to adults. Occasionally in susceptible patients hematuria and pain on urination may be noticed, also a skin rash not unlike measles. His "experience with hexamethylenamin in the treatment of acute colds and acute and chronic bronchitis has been most gratifying. In the case of individuals subject to severe colds, the stage of acute coryza has been definitely lessened in length, and in practically all cases the succeeding stage of acute bronchitis has been slight or missed entirely." He reports the successful use in "2 antrum cases which had resisted several surgical procedures." Vanderhoff considers it "our best remedy in acute bronchitis. It is also of value in certain cases of chronic bronchitis, while on others it does not seem to have any effect."

Miller observed that "in most cases of common colds it acts promptly and effectively. The irritating, watery secretion of coryza stops, the fever, aching and malaise of influenza cease, the threatening disease is averted. As a cure for colds it may be as great a boon as it has been proved to be as a urinary antiseptic." In Heitmueller's case of chronic bronchitis, "after three doses the character of the expectoration changed from mucopurulent to mucoid, and after six doses the quantity was very much diminished." Portions of the sputum tested after the third and sixth doses gave positive reactions for formaldehyde.

Armstrong and Goodman made a careful examination of the sputum after administration of hexamethylenamin in 12 cases. In each the dosage was 25 gr. daily, and in each case the tests were positive. Among these were 9 cases of pulmonary tuberculosis, 1 pneumonia, 1 bronchitis, and 1 asthma. The technique is as follows: "The twenty-four-hour amount of sputum was put in an Erlenmeyer flask, diluted with water, acidified with sulphuric acid and distilled, the distillate being collected in water in a cooled Erlenmeyer flask. The distillate was then tested for hexamethylenamin by adding to it 4-6 drops of milk, three drops of a 3 per cent ferric chloride solution and stratifying the mixture after agitation on concentrated sulphuric acid. At the point of contact an amethyst color is observed."

Practically all writers insist upon the drug being always given dissolved in half a glass of water, never alone, and the drinking of copious draughts of water during its administration. They also insist on the giving of large doses, though the amount given seems to vary from 25 to 40 gr. daily.

The New York law of 1907 thus defines the practice of medicine:

"7. The practice of medicine is defined as follows: A person practicing medicine within the meaning of this act, except as hereinafter stated, who holds himself out as being able to diagnose, treat, operate, or prescribe for any human disease, pain, injury, deformity or physical condition, and who shall either offer or undertake, by any means or method to diagnose, treat, operate, or prescribe for any human disease, pain, injury, deformity, or physical condition."

To cure practically any case of bed sores: wash frequently with a solution consisting of two drams of ammonium chloride, 4 ounces of water and 12 ounces of alcohol. Dry gently and powder with stearate of zinc. Of course the patient's position should be changed frequently and rubber air cushions should be used whenever required.

Every patient with tachycardia, or exophthalmos or with a moderately enlarged thyroid, with a history of loss of weight, nervousness, sleeplessness, lack of physical endurance, excessive sweating, frequent severe headaches, deserve to be very carefully studied from the standpoint of possible Graves disease, or what is much better termed hyperthroidism. At the risk of being trite, I repeat that there is no one feature in the medical treatment of Graves disease that is so important for the welfare of the patient as that of an accurate diagnosis at a time when secondary changes have not intervened.—*Beebe.*

IODINE AN ANTIDOTE TO CARBOLIC POISONING.—In the *Lancet* of August 3d. 1907, J. Maberly published three cases of carbolic acid poisoning which had completely and rapidly recovered after the administration of tincture of iodine as an antidote. In one of them the treatment was not applied until 30 hours after the ingestion of the poison. Another case is reported where a drachm of tincture of iodine, well diluted, was given in two doses to a child, the first very soon after carbolic acid had been swallowed, the other one hour later, followed by prompt recovery.

Iodine forms a harmless soluable compound with phenols, and its affinity for phenol is very much greater than that for living protoplasm, hence its unique value for all forms of carbolic acid poisoning.

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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Editorial

Attention is called to the fact that the State Association will meet this year much earlier than usual. Charleston is the place and May 21, 22 and 23 the time. Get your papers ready, and let us make this the biggest ever. Dr. A. P. Butt, the secretary, has space on the program for a number of good papers. Give him your subject at once, and then get down to work on the papers. "He who begins is half done," is the old proverb, and a true one. Then begin and now!

You, member! Have you paid your dues for 1913? If not, why not? You have paid your other January debts. Why not this one? The outlook is encouraging. We already have on our list over 40 members who are new to us. Hold on to the old ones by collecting the dues *now*, and at the end of the year we will show the largest membership we have ever had. Every year we lose about fifty old members, and that means fifty dollars lost to the JOURNAL, as these men get the JOURNAL the whole year and the great majority will not pay for it at the end, even when a bill is sent to them. This can be avoided by collecting all dues *now*. Do it. If a member declines to pay send his name and we will cut it off the mailing list, thus saving a dollar for every such name reported to us. Ascertain at once whether or not your members intend to stick. This is business. Delay is not.

THE FRIEDMAN TUBERCULOSIS CURE.

Very many of our readers have no doubt heard something of the claims made for the above alleged cure for tuberculosis. It has been heralded through the lay press until many of the patients suffering from this dread disease have been led to hope that at last there is a good time coming for them. If this latest remedy prove, like so many before it, a delusion and a snare, oh the pity of it! "Hope springs eternal in the human breast," and it is well that it is so, else this would be a gloomy world indeed. But to arouse hope without good foundation in those who are doomed to die, is cruel indeed.

The medical journals have been disposed to look upon this latest remedy with grave misgivings. We have refrained thus far from making any comments, as the data upon which to base an opinion were not yet at hand. Now, however, we have the lecture of Dr. Friedman in full, with the discussion which followed its presentation in the Berlin Medical Society on Nov. 6th. The U. S. Senate, by resolution of Jan. 2, 1913, thought well enough of this remedy to seek full information through the President, who has since submitted to the Senate "a memorandum of the Secretary of State inclosing a report prepared by the Consul General at Berlin in regard to the Friedman cure of tuberculosis." This document includes Dr. F.'s lecture in full, entitled *"Therapeutic and Prophylactic Inoculation of Human Tuberculosis,"* together with discussion of the subject by many members of the medical society before which the lecture was presented, with a number of illustrative cases. We shall here try to give to our readers as correct an account of the

matter presented as is possible in an editorial that may not be too lengthy.

In the first place we may remark, that we fail to discover anything in the manner of presentation by Dr. Friedman that can properly excite adverse criticism. It appears that he has been pursuing proper investigations for a very long time; that he has in these had the assistance of many of his colleagues who placed material at his disposal—patients afflicted with all forms of tuberculosis; that he has at last arrived at such a degree of success as to justify him in placing the facts before the medical profession, which he has done, exhibiting a number of patients who have been treated by the new method, and who now show either very great improvement or entire cure. We here present his claims, with points drawn from the discussion following their presentation.

Friedman says that a substance suited to the cure of tuberculosis must fulfill the following requirements: It must consist of genuine, living tuberculosis bacilli, naturally and absolutely unvirulent, and free from any additions or disturbances. He claims that there is a great difference between tubercle bacilli, one race not being like the other. After vainly trying many virulent cultures for therapeutic purposes, he at once met with great encouragement when he began the use of a race of tubercles which he discovered several years before this, "but whose effect he succeeded in completely changing only recently." Not until he succeeded in "removing the last traces of virulence by suitable interbreeding and passages did he use the preparation on man." He repeatedly used it on himself, then on adult tuberculosis patients, then on consumptive children, and finally as a prophylactic in children. He has found the injections harmless, even in large doses, and whether applied subcutaneously, intramuscularly, intravenously, *per os*, conjunctively, or on open tuberculosis lesions. All that we yet know of the remedy used is, as stated by Friedman, that it "is not artificially weakened human or bovine tubercle bacilli, but * * tubercle bacilli which are already unvirulent and which have never been virulent. My method of tuberculosis treatment with living unvirulent bacteria is the only promising and proper one." We understand that this particular strain of bacilli is a discovery of Friedman, and not in any sense a manufactured or changed product. The American Consul General, in his letter of transmissal, says that the bacilli are taken from cold-blooded animals; and Mueller, in his discussion, says: "The remedy does not consist of human or bovine tubercle bacilli which have been artificially weakened in their virulency, but of the bacilli of a cold-blooded animal, which are naturally unvirulent to man." In the printed address we fail to find this statement as coming directly from Friedman, but since his arrival in this country he has stated that the bacilli he uses are from a turtle, has been injected with human tuberculosis bacilli.

The preparation has been used in about 1200 cases of tuberculosis. These include disease of the lungs, bone, joints, skin, kidneys, bladder, etc..

It is administered subcutaneously, intramuscularly, or intravenously, the intramuscular being the preferable method At the place of injection an infiltrate forms from the size of a walnut to that of a small apple. This may not disappear for weeks or months, but the healing goes on as long as this continues to absorb. So the injections are given at long intervals. Rapid and pronounced improvement sometimes follows a single injection. In the cases thus far cured no relapse has occurred. In cases of lung tuberculosis the disease subsides rapidly almost without exception, if not too far advanced. Night sweats soon cease, fever early yields, and many subjective complaints, as pains in chest, a sense of pressure, fatigue, insomnia, loss of appetite, etc., disappear. Progressive emaciation ceases. Laborers under treatment never quit their work, but gain flesh and strength, the cough disappearing without any internal medication. We here give a few illustrative cases.

A consumptive with hemoptysis, night sweats, diarrhea for six weeks with 20 to 30 stools daily, has all these symptoms disappear after three injections.

Case with many nodes and fistulas of the epididymis healed after five doses, all fistulas closing and nodes disappearing.

Case of tubercular testicle, with heavy pus

discharge, one testicle having been removed. A complete cure resulted.

Two cases of tuberculosis of the kidney and bladder greatly improved or cured. One kidney in each case had been removed before the new treatment was instituted.

A case which, in addition to lung disease, presented ulcerations of the rear wall of larynx and of both vocal cords, after three injections showed improvement in the lungs and progressive flattening and cicatrization of the laryngeal ulcers.

We quote further: "Consumptives frequently claimed that they were absolutely seized with a ravenous hunger after the injections. Coughing and expectoration diminished and disappeared under the influence of the injections, without any other medicines having been administered. At the same time the auscultatory symptoms gradually improved and disappeared."

In the discussion that followed Friedman's lecture, Prof. Mueller said, that in three of his cases of bone tuberculosis the result was "surprisingly good." In a knee joint case "the fungus knee was enormously swollen, severely inflamed, and of a bluish-red color. Abundant pus had flown out of six deep fistulas for several months," and he had considered amputation. After two injections improvement set in, and "a cure may now be said to have been affected." He said further: "The cures which I have seen are really permanent, and have in part been attained in such severe bone tuberculosis that certainly such great success would not have been attained by any other remedy hitherto known." Schleicher gave this written testimony: "I have seen old cases of coxitides, tumor albus genu, tuberculosis of the metacarpal bones, fistular formations following cheesy decomposition of the neck and supraclavicular glands subside within periods which rendered a causal relation between the injection and the cure always apparent. The unanimous declaration of numerous patients at the polyclinic were surprising. A part of these were afflicted with grave forms of general tuberculosis, and all freely admitted their improvement and convalescence." Karfunkel, who conducts a tuberculosis clinic, after observation of 450 cases treated, testifies to the absolute harmlessness of the remedy, and adds: "Out of a total of 200 pulmonary consumptives, I have not seen a single case that did not favorably react to the remedy. * * A boy with the severest knee-joint tuberculosis imaginable, and whose thigh was to be amputated, had his leg saved by two injections." He also says: "I am satisfied that tuberculosis and everything traceable to it reacts as precisely on the Friedman injection as lues on mercury or salvarsan."

Kuester, Heyman, Blaschko and others who participated in the discussion gave more or less favorable testimony as to the efficacy of the new treatment. Without exception this testimony was from men who had used the remedy or seen its results in the pracetice of its author. On the contrary, a number of the speakers were either conservative in their attitude or skeptical as to the results reported. After a somewhat careful reading of the lecture and the discussion following, the conclusion seems to be a just one, that those who approved of the new treatment had either had personal experience with it, or had carefully observed the work of Friedman, into whose hands a number of their patients had been placed. On the other hand, those who either opposed the treatment, or received the reports of it with considerable doubt as to their strict reliability, had had no experience with it, and knew very little of the observations of others.

What is to be the future of this much vaunted remedy for the disease which cuts down so many in the very flower of youth? How long has it been since salvarsan was proclaimed to the world as a sovereign remedy for that other dread disease that threatens to destroy the vigor of the nations? At first one dose was to effect a permanent cure. Then several doses were found to be necessary. Later a combination with the proven remedies was advised by the most experienced men. And we soon learned that this specific was dangerous, and deaths from it were by no means infrequent. And now there are few to proclaim aloud its virtues as greatly above our old friends, mercury and iodin, while recognizing that it is a useful addition to our therapeutic resources, and in exceptional cases seems to accomplish exceptionally good results.

We have scarcely sufficient data as yet upon which to found an intelligent opinion of this latest tuberculosis remedy, but are

inclined to believe, with many of those who know considerable of the effects of the new remedy, and these not obscure men, but professors and clinicians of the highest standing in Berlin, that a valuable addition has been made to our remedies for the various forms of tubercular disease. It is too early to rejoice greatly, however, or to congratulate our patients that their disease is now to be cured by a few hypodermic injections of a harmless fluid. We may well adopt the position taken by the profession of Berlin, as given by the U. S. Consul General in his report to our Secretary of State:

"It is the consensus of opinion of the Berlin profession that the results of the new treatment can not be definitely acknowledged until the facilities have been offered to the various physicians to observe the effects of the preparation under their own administration, and then only after sufficient time has elapsed to determine whether or not the cures or the instances of amelioration of the condition of the patient are permanent."

Let not "fools rush in where angels fear to tread," as was too much the case with salvarsan. The experiments should be conducted in the large hospitals and tuberculosis clinics, where skilful observers are to be found, and abundant material is always at hand, rather than in private practice in which patients are comparatively few and not easily kept under close and continuous observation. S. L. J.

Our friend Dr. Tom A. Williams of Washington City sends word to the JOURNAL, that he and Mrs. Williams will be at home on March 4th to all West Virginia doctors, their wives and friends, who attend the inauguration of President Wilson. "Come after the parade, from 5 to 7 o'clock," 1705 N. Street, N. W. On behalf of the W. Va. profession, we thank the Doctor and Mrs. Williams, and regret that the editor can not accept the generous invitation. We doctors have an inauguration of our own in West Virginia. Here's to Governor Hatfield, M.D.

We call attention to the advertisement of Dr. J. W. Williams of Richmond, who has a Sanitarium for the cure of morphine, cocain and alcohol habitues. He claims no patent method, but pursues an ethical course, following recognized lines of treatment.

The W. B. Saunders Company announce the early appearance of a one-volume History of Medicine written by Dr. Fielding H. Garrison, of the Surgeon-General's office. This enterprising firm has removed to its new building and all physicians are cordially invited to call and examine the stock of books, as well as the elegant new quarters.

ELKINS, W. VA., Feb. 22, 1913.

Editor W. Va. Medical Journal:

In my communication in the last issue, I stated that the effort to introduce a public health bill in the present legislature was abandoned, and that instead the same was to be directed towards the passage of a resolution to appoint a commission to revise the entire Chap, 150. Since then, however, it was decided to go back to the original plan and have a bill introduced. This was done, the bill being the one that the Joint Committee of the State Board of Health and the State Medical Association drew up at the Clarksburg meeting, with some changes and additions. It was introduced in the House by Dr. F. F. Farnsworth through whose efforts it was passed there, and I understand that Dr. James McClung was instrumental in getting it through the Senate. It is now a law, the Governor having approved it.

Those who will read the new law will no doubt find room in it for improvement and some things for criticism. Nevertheless, all will have to admit that it is a great improvement upon the old law. Take, for instance, the stipulation of the amount that the Board of Health may expend. Instead of fifteen hundred dollars, it is now fifteen thousand dollars. The establishment of a State hygienic laboratory will prove quite a boon. The provision for one member of the Board giving his entire time to public health service is a great advance. This much is certain, that the members of the State Board of Health have now been placed in a position to do for the people more than they ever could heretofore. Undoubtedly the people directly and through the medical profession will closely watch to see what disposition the Board will make of the increase in power and means given to it. I believe that every member of the Board is alive to this increased responsibility. Yours very truly,

WILLIAM W. GOLDEN.

[We expect to print the whole new law in our next issue.—EDITOR.]

MEDICAL IDEALS.

(Extract from an Oration in Medicine before Ky. State Medical Association, by Dr. W. W. Anderson, Newport, Ky).

The ideals of today are the history of tomorrow in the embryo.

Who better than the man of medicine have high ideals? Who better than he may anticipate the history he is helping to make? Who may look back to the history of the past with such pride in his profession? If we may judge the future by the past, if the deeds that men

have done are a guide to what they may do, if the records of other days are an inspiration for days to come, if a noble heritage oblige us to nobility, then how great a heritage of debt to the past! How deep is our duty to the present! How lofty is our inspiration for the future!

Every great movement for human welfare in promoting health and vigor has been instigated, advocated and carried to success chiefly by the medical profession to its own great loss, and often in the face of bitter opposition from the people who were to be benefitted. The whole pathway of medical research and progress is marked by the bloody footprints of the martyrs of science—a noble martyrdom as lofty as any the church can boast. Vesalius was persecuted because he dared to study the dead body that he might know and heal the living. Jenner was ostracised and pictured as a devil incarnate. Harvey was described as an infidel. McDowell was threatened with criminal prosecution. Jeffries was mobbed. Flexner is branded a monster. Carroll, Lazear, and others died to prove the cause and secure the prevention of yellow fever, and the government took twelve years to grant a widow's pension for the service.

No other calling or profession has such a record of constant and unselfish devotion to humanity. When the great Judgment Day shall come, Medicine may stand erect and humbly unabashed, while even the Law and the Church must hang their heads, for Medicine has always been the friend of the people. The Law, designed to safeguard the liberties of man, has often riveted the fetters of his slavery; and the Church ordained to give men that highest truth which shall make them free, has at times so far forsaken her high behest as to declare the cruel yoke of the oppressor holy and heaven-sent. No such charge can be sustained against the healing art.

MARION SIMS AND THE SOUTHERN GYNECOLOGISTS.

On this, the centenary anniversary of the birth of James Marion Sims (January 25), special interest attaches to the work of his Southern colleagues who did so much for the foundation of operative gynecology, a branch of medicine which is usually acknowledged to be of American origin. Sims himself was the founder of plastic surgery of the uterus (1861-1866), first described vaginismus (1861) and put cholecystotomy on a permanent basis (1878). His introduction of the silver wire suture, the Sims position, the Sims speculum and a new catheter for drainage practically made the operation of vesicovaginal fistula what it is today, and his triumphal progress through England, France and Germany resembled Lord Lister's in regard to the rapidity with which his ideas were assimilated.

Far back in the eighteenth century William Baynham of Virginia performed two successful operations for extra-uterine pregnancy (1791-1799), and John King of South Carolina wrote the first book on the subject 1817). While Ephraim McDowell of Virginia may not have been the first one to perform oophorectomy, his statistics of eight successful cases out of thirteen justify his title of "the father of ovariotomy," for they established the operation as a recognized surgical procedure, and it was thereafter rapidly extended by the Atlees in America, Clay in Manchester, England, and Nelaton and Kœberle in France. William Gibson of Maryland performed three successful cesarean sections on the same patient (1835-1837). John Peter Mettauer in 1838 recorded perhaps the first successful operation for vesicovaginal fistula. In 1844 Josiah Clark Nott, a South Carolinian, performed the first operation for neuralgia of the coccyx to which the name "coccygodinia" was given. Thomas Addis Emmet of Charlottesville, Va., a pupil and associate of Sims in New York, carried out the latter's ideas and became a great master in the plastic surgery of the vagina, bladder and perineum. In Theodore Gaillard Thomas we have another eminent South Carolinian. He substituted gastro-elytrotomy for cesarean section (1870), and was the first to perform vaginal ovariotomy (1870). His practical "Treatise on Diseases of Women" (1868) was a standard authority in its day and has been translated into many languages. Over 60,000 copies are said to have been sold. Robert Battey of Georgia, a surgeon in the Confederate Army was the first to perform normal oophorectomy or Battey's operation (1872), the removal of both ovaries in neurotic women. From what is known of the effect of the ovarian secretions on the female organism, Battey's operation is now physiologically justified, Tait's idea (1879) being to remove the adnexa because they were diseased. Nathan Bozeman of Alabama introduced (1781) an important operation for complication in various female fistulas, with unique methods of drainage. Through using the clamp-suture of Marion Sims in vesicovaginal fistula, he discovered that a button might be combined with older methods, and the button-suture was the happy outcome, resulting in 100 per cent of successful cases, instead of 25. Prevost of Donaldsonville, La., performed the first cesarean section in America (1830), losing but one mother and operating twice on the same patient. Joseph Price of Rockingham County, Va., who died in 1911, established himself in Philadelphia, where he entered on his successful career and became the militant advocate of the new surgery. He exerted great influence on the development of modern pelvic and abdominal surgery. He found the surgical world rebellious against his progressive ideas, but with Spartan courage, matchless skill and judgment as an operator, he forged ahead and did much in regard to pelvic abscess, ectopic pregnancy and puerperal peritonitis (1889-1890). As McMurtry says, "He stripped from surgery all complicated paraphernalia and made its technic simple and thorough. . . . Every prominent surgeon in this country today demonstrates in his methods the impress of this master surgeon."

We congratulate our professional brethren of the South on this distinguished line of workers in one of the most important branches of medical science.—*Editorial Jour. Am. Med. Assn.*

"A SOCIETY FOR THE ADVANCEMENT OF CLINICAL STUDY has recently been organized in New York City, the purpose of which is to maintain a bureau of information which will furnish to resident and visiting physicians definite information regarding the clinical facilites of the hospitals and laboratories of the greater city. For this purpose a bulletin board has been installed at the Academy of Medicine, 10 West 43rd street, in charge of a special clerk who will be on duty between the hours of nine and six to answer all telephone inquiries (Telephone 974 Bryant). The bulletin board will consist of two sections, on one of which will be posted month by month, the regular clinics, medical and surgical, and also laboratory demonstrations, all of which are held at stated hours. The second section will include full announcements of daily operations and demonstrations of cases both medical and surgical, which as far as possible will be announced on the day preceding their performance. It is believed that these facilities will afford physicians who are interested in observing particular operations and operators or clinicians, an opportunity to obtain the desired end with the least trouble. It is hoped that by this means the large and unexcelled clinical facilities of New York City will be made more accessible to those who may decire to make use of them."

ROBERT L. DICKINSON, M.D.
GEO. W. KOSMAK, M. D.,
For the Executive Committee.

Reduced mortality from diphtheria antitoxin The N. Y. Board of Health reports as follows:

The free administration of antitoxin in diphtheria and the performance of intubation by the Inspectors of the Department of Health of the New York was begun in 1895, the objects in view being not only the cure and prevention of the spread of the disease, but also the education of the medical profession and the general public. These ends have been accomplished. The death rate of the disease in Manhattan and The Bronx has fallen from 15.9 per 10,000 of population in 1894 to 2.2 in 1912. In 1894 twenty-nine out of every one hundred cases reported died. In 1912 less than nine cases out of every hundred died. Since 1895 almost 40,000 cases have been injected with antitoxin furnished by the Department of Health, and of these less than 6 per cent. proved fatal. Finally, the records show that at the present day practically every case of diphtheria receives antitoxin.

The value of the bromides as therapeutic agents, has only been accentuated in recent years. Many chemical modifications of the bromide salts have been offered, but not a single one has been found which possesses properties that make it more desirable for the practitioner, than the well known compounds. On the other hand, the administration of the pure salts is often attended by certain disagreeable results, commonly embraced under the name of bromism. These disagreeable by-effects can be almost entirely eliminated by the use of adjuvants and correctives. Such a combination is offered in Neurosine, which represents the most careful product of pharmaceutical skill, providing the profession with a nerve sedate which is safe and efficient.

State News

Our colleague, Dr. G. D. Lind, is writing a book for doctors. It is a Ready Reference Practice, with the subjects arranged alphabetically like an encyclopedia; no index but a glossary of all technical terms. The book will be about 300 pages octavo.

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Dr. S. P. Carter, formerly of Montgomery, is now a practitioner of West Manchester, Ohio. Dr. A. E. Altizer formerly of Logan, has removed to Man, W. Va.

* * *

Dr. W. C. McCord, formerly of Butler, Co., Pa., has located in Huntington, and like most good physicians, has joined the progressives in the county society.

* * *

Dr. J. C. Schultz, formerly of Cincinnati, O., has located in Huntington. The price of prosperity is an influx of physicians.

* * *

Dr. J. A. Nydegger, of the U. S. Public Health Service, a former West Virginian, has been appointed lecturer on Tropical Medicine in the University of Md.

* * *

Dr. Holman Branard has accepted the position of resident physician at the Chesapeake & Ohio R. R. hospital, Huntington.

* * *

Dr. J. G. Pettit, assistant physician of the Weston asylum, has recently received the appointment of assistant physician at the State hospital for the Insane at Jacksonville, Ill. The state thus loses a good official.

* * *

Dr. L. N. Harris is at the Mayo Clinic, Rochester, Minn. He has dropped out of the local medical association.

* * *

Dr. J. E. Cannaday of Charleston, is visiting Central America and the Canal zone.

* * *

Dr. J. R. Caldwell of Wheeling, has recently undergone an operation for appendicitis. It was caught in its very inception, and as a result the patient it doing well. Not every appendix operation is done for "the money that is in it." We doctors sometimes take our own medicine, which is cheap.

* * *

President Frank L. Hupp has recently been

visiting some of the local Societies in the hope of increasing the interest in medical organization. His heart is in the work. Let all help him in the cause. * * *

IN MEMORIAM.

Dr. P. B. Ogden, one the oldest and best known residents of the Monongahela valley, died at his home at Shinnston, Nov. 16th. Dr. Ogden was ill but a few days and his death was entirely unexpected. He was able to be up and walk around his room a short time before the sudden attack of heart failure caused his death.

Dr. Ogden was born in Marion county, April 29, 1839. He was educated in the common schools and Morgantown Academy (now West Virginia university) from where he graduated with the degree A.B. He was also a graduate of the Jefferson Medical college, Philadelphia. He began the practice of medicine in Fairmont and was until two years ago actively engaged, when he retired. During his long life in Marion county he became well known throughout the Monongahela Valley.

He was a member of the Baptist church and was one of the founders of the church in Fairmont. At various times Dr. Ogden was president of the Mariou county Medical Association and the president of the Fairmont City hospital.

In 1860 he was married to Mary Ellen Coombs, who died in 1908. He is survived by four children, the Hon. Howard N. Ogdon and Dr. W. C. Ogden of Fairmont, H. C. Ogden of Wheeling, and Mrs. Winfield Spragg of Denver, Colorado.

Society Proceedings

AMERICAN PROCTOLOGIC SOCIETY

OBSERVATIONS UPON THE RELATIONSHIP OF TUBERCULOSIS TO PERI-RECTAL SUPPURATIONS. By COLLIER F. MARTIN, M.D., of Philadelphia, Pa.

(Continued from Feb. Issue).

The author has found pulmonary tuberculosis so frequently associated with his cases of peri-rectal suppuration that he determined to report a consecutive series of cases, with findings.

The report comprises 376 consecutive cases, 76% being males, and ranging in age from 7 months to 87 years. The majority of these cases (322) occurred in the most active period of life, from 20 to 60 years.

He divided his cases into four major groups; the actively tubercular (144 cases), the chronically tubercular (68 cases), the phthisenoid (20 cases), and those pationts in apparently good health, (55 cases). This would indicate that at least 212 cases or 61% were cases of known tuberculosis.

There were 309 operations performed on 306 patients, under various anesthetics; spinal anesthesia 145 times, ether 54 times, and local and other anesthetics on the remaining. He chose spinal anesthesia where no other preference was expressed by the patient or the attending physician, on account of the associated tuberculosis.

Following these cases for the past four years he has traced thirty-seven death of which thirty-four died of active tuberculosis or its complications.

The abscesses or fistulae in most of these cases could not be classified, from their appearance, as being locally tuberculosis. Where the tubercle bacillus was easily recovered from the tissues or discharges, there was usually a very active pulmonary infection present.

The writer believes that the usual explanation of the association of pulmonary tuberculosis with rectal suppurations, lies in the fact that any pulmonary lesion, however small or inactive, may so alter the patient's vital processes and so lower the opsonic index, as to make him particularly susceptible to pyogenic invasion. The same may be said of pyogenic infections in general, but the peculiar anatomic conditions existing in the rectum and its very active physiologic function, makes this a fertile region for external and internal trauma with subsequent inflammation and infection.

Traumatism is considered to be the chief active factor in impairing the integrity of the tissues.

The writer emphasized the fact that a careful lung examination should be made in all cases of peri-rectal suppuration. He also made a strong plea for a careful and extended supervision of the patient's general health for a long period after all surgical treatment had been discontinued.

The vital consideration in these cases is not the question as to whether or not the local lesion is tuberculous, but has to do with the presence or absence of active or latent tuberculosis in the patient, and his chances of having good general health after surgical intervention.

FURTHER OBSERVATIONS ON PRURITUS: ITS PROBABLE ETIOLOGIC FACTOR BASED UPON ORIGINAL RESEARCH.

By DWIGHT H. MURRAY, M.D., of Syracuse, N. Y.

This paper was a continuation of the work that he has been engaged in for the past two years and which he presented to the American Proctologic Society, at the Los Angeles meeting, in 1911.

From his experience, since discovering that a skin infection is the important factor in pruritus ani, he believes that we are now in a position to state that there may be two varieties of pruritus ani; one that may be coincident with some of the diseases of the rectum and in which the skin infection is not present. He designates this form as Pruritus Ani Simplex; the variety which is chronic in its character, and, in which the skin infection is present, he designates as Coccigenous Pruritus Ani.

He states that he is continually seeing patients who have all varieties of rectal diseases, including chronic diarrhea and proctitis, in many of

which there is a leakage of moisture upon the anal skin; in very few of these cases does he find pruritus ani, and he believes that when it is present, it is coincident rather than having been caused by these discharges occurring in various rectal diseases.

He gives a resume of an examination of 900 consecutive cases, in which he finds 490 cases of constipation, 369 of hemorrhoids, and 94 of pruritus ani. Of the 94 cases, which gave a history of pruritus ani, he finds that 5.5% of the 900 cases examined who had pruritus ani were constipated; 2.3% had hemorrhoids; 1.2% had some form of anal growth; 2.2% had ulceration; 2.5% had diseased crypts; 1.3% had hypertrophied papillae; .03% had polypi; .03% had fistulae. He believes that the relatively small percentage of each of these conditions that were present in the pruritus ani cases, show that they were coincidental when present and could not be classed as causes of pruritus ani.

Thirty-two of these 94 pruritus cases have been examined bacteriologically by him and all of them showed streptococcic skin infection as the predominating condition.

He believes that the excess moisture and the infiltrated condition of the skin in these cases, is due to the low grade inflammation caused by skin infection and is not the result of moisture coming from the inside of the anal canal.

He presented photographs of petri-plates, of a typical case, showing the immense numbers of streptococci at the time of the first examination; another photograph of the same case, showing that streptococci were not present in the culture taken from the anal canal, and another photograph of a petri-plate, of the same case, after four months' treatment (one month after itching had ceased), in which last photograph no streptococci were present.

He gives a report of his technic in greater detail than in last year's paper, because he has found that the last year's report was not understood by some physicians who had employed his method.

From some reports received he believes that stock vaccines will not give good results because they are made of a different branch of the streptococcic family than the one causing pruritus ani.

He gives detailed reports of the cases treated, both of the first and second series, showing very marked improvement in all of the cases and cures, so far as present conditions are concerned, of others.

He presented a series of twelve control cases, having a variety of rectal diseases, that are usually given in text-books as causes of pruritus ani, none of which had the disease nor did they show a skin infection.

He said that the conclusions of the first year's work still hold true, and he gave the conclusions of his second year's work as follows:

1st. It is shown by the nine hundred consecutive cases of rectal diseases, that constipation and hemorrhoids, or any lesion, are coincidental or may be predisposing, but not the exciting cause of pruritus ani.

2nd. Even when there is a discharge of pus or other moisture on the skin about the anus it is not the actual cause of pruritus ani, unless there is a streptococcic or other infection of the skin. They may exist together but are then only a coincidence.

3rd. All investigators, in making cultures, should use in addition to the hand media, the liquid media and Gordon's series of carbo-hydrates, if they wish to differentiate the streptococci and other bacteria.

4th. Avoid excessive reaction.

5th. Use small initial doses.

6th. Give subsequent injections only after the previous reaction has completely subsided.

7th. He suggests the following change in the nomenclature of pruritus ani, by recognizing two varieties: Pruritus Ani Simplex, and Pruritus Ani Coccigenous.

ANO-RECTAL DISEASES DUE TO VENEREAL INFECTION

By JAMES A. MCVEIGH, M.D., of Detroit, Mich.

Venereal disease is an important factor in the etiology of disease in all parts of the human system. Regional relationship of genital organs to anus and rectum render the latter especially prone to this kind of infection. Venereal disease of anus and rectum either direct, through practice of vicious habits, or indirect, or accidental, through extension of infection to these parts from other sources. Less direct infection of this nature in this than in foreign countries. Gonorrhoea, chancroid and syphilis, the principal venereal factors in ano-rectal disease. Description of symptoms, diagnosis and treatment of these conditions when appearing in disease of the rectum and anus. Report of a case.

CLINICAL SOCIETY OF NEW YORK POLYCLINIC SCHOOL AND HOSPITAL.

Meeting of January 6th, 1913.

DR. A. T. MORROW'S case of Ruptured Bladder.

The patient a male, 22 years old, had pelvis and abdomen crushed between two freight cars two weeks ago. Brought to the hospital in shock. Only signs of injury externally were large fluctuating mass over right side above thigh, and a slight swelling over the pubes. Pure blood was obtained by catheter.

Operation revealed all tissues contused, right rectus completely torn across and free urine in peritoneal cavity, and no tear in bladder. The latter was incised and finger found intraperitoneal tear in upper left quadrant. Also partial rupture of sigmoid to mucous membrane. Ce-

cum was torn from its attachment for three inches and posterior peritoneal lining ripped from side to side. Torn parts were sewed and catheter introduced. At present pulse and temperature are normal. Ecchymoses prominent over adbomen. Catheter is still in place and right rectus is separated, awaiting a later operation.

DR. JOHN A. BODINE. Removal of cancer of tonsil through incision in neck.

The growth began as a small erosion on the tonsil, and was treated medically four weeks. After having spread over the whole tonsil pillars of fauces, the folds and tongue, great advance was shown in this short time. The patient came for radical treatment two weeks ago. The method used was that from without, transforming a cavity operation into a surface one, and facilitated a thorough cleaning out. A ligature was thrown about the external carotid, and all the glands of the neck, including the submaxillary gland, which is a double gland with lymphatics on the inside of it were removed. The lower jaw was sawed through obliquely so that the opposing forces of the masseter and external pterygoid would subsequently hold the edges in apposition. In this particular instance, extra strength was afforded by the insertion of a Lane plate. The two tonsils, part of the floor of the mouth, pillars of the fauces, and tongue were removed. The patient is quite comfortable now, a few days after the operation, but the prognosis for life is bad. The richer supply of lymphatics in a region, the more rapid the growth. The question of removal of a part of a growth for microscopical examination came up and both Dr. Bodine and Dr. Bainbridge condemned it. In every case a large opening should be made and complete enucleation done—not piece-meal work. Dr. Bodine reported a case of a man with a very small ulcer on the tip of his tongue from which a specimen was taken for microssopical examination. In three days a large swelling appeared on the side of the neck. These growths spread like wild fire when they are tampered with. Dr. Bodine said that the average time of relief for peripheral operations is ten months, and wished to go on record as saying that 70% of patients having cancer anywhere in the body die a cancerous death.

DR. JOHN A. BODINE. Avulsion of posterior root for trifacial neuraigla.

The patient a woman of 63, sought relief for tic douloureux by all the ordinary measures and by alcholic injections without result. Permanent operative cure depends upon the inability of the nerve to regenerate which occurs when the nerve has no neurilemma. The sensory root of the fifth nerve beyond the Gasserian ganglion has no sheath, and therefore, if it is cut in that position it cannot regenerate. The death rate from this operation is 3% to 4%. In the operator's opinion it is not very difficult to perform. A prophylactic ligature is placed around the external carotid artery, an incision recommended by Cushing made over the zygoma, and the hemorrhage from the middle meningeal artery controlled by plugging it down in its bony canal. The white glistening root of the fifth nerve beyond the Gasserian ganglion is easily seen and severed. The anaesthetic can now be discontinued since there is no sensation for the rest of the operation. This patient on the following day had a facial paralysis which soon cleared up, and since the nerve at operation was not cut, the paralysis was probably due to traction during operation. The motor root that lies immediately above the Gasserian ganglion must be avoided, otherwise paralysis of the muscles of mastication ensues. The patient is now free from pain, with slight hyperesthesia. The day of Abbe's operation is gone—there is only a small field for peripheral operations. Alcohol injections give just as much relief as any able defense of the operation for the resection of the sensory root of the fifth nerve. The speaker had considerable experience with this operation and spoke highly of it. He opposed alcohol injections on the ground of complications. Dr. Keller disapproved this by quoting favorable statistics in a large number of cases. The time of relief in skilled hands was from six months to two and a half years, which is a very satisfactory result and a better showing than in peripheral operations.

DR. JOHN A. BODINE. Cystic Tumor of cerebellum.

Brain tumor operations are increasing every year, but operations for removal of a cyst is sufficiently rare to justify showing this case. Four months prior to the operation, which took place two years ago, this middle-aged man suffered loss of health from no assignable cause. Later became more irritable, eyesight weakened, and one day while walking fell unconscious in the street. The symptoms of increased intracranial pressure now developed. Vomiting, headache, progressive blindness, loss of equilibrium, with falling to right side, paralysis of muscles of extremities, disturbances of special senses and reflexes, incontinence of urine and feces, and extreme pain. A spinal puncture was suggested of which Dr. Bodine emphatically disapproved. Since the fluid in this case is of no diagnostic value, and the cerebellum is already pushed down into the foramen magnum by the existing increased pressure the withdrawal of fluid may impact the brain still further in the opening and instant death follow. The patient was operated upon in a sitting posture and a cyst the size of a thumb was found, which burst. Its lining being too thin to be cut away, surrounding portions of the cerebellum were removed. The patient made a rapid recovery and is in good health. Dr. Bainbridge raised an interesting question of the effect of tumors upon the morale of the individual. He thought that possibly care should be exercised in convicting these cases of cerebral tumor for acts committed while suffering from their affliction. Dr. Kennedy suggested that the field of operation in brain work could be kept in better condition while operating if the surgeon used the suction apparatus as used by dentists. "W."

CABELL COUNTY MEDICAL SOCIETY.

HUNTINGTON, W. VA., Feb. 15th, 1913.

Editor W. Va. Medical Journal:

The regular monthly meeting of this Society was held in the Hotel Frederick, Thursday evening, Feb. 13th.

Dr. Grey of Ironton, Ohio, was with us and delivered an address on "Silent Phases of Syphilis." The doctor's address was very interesting and helpful and provoked a two hours' discussion that was equally as valuable as the remarks of the orator.

Five new members were admitted: Dr. H. A. Barbee, Pt. Pleasant, W. Va., Dr. M. F. Brown, W. Hamlin, W. Va., Dr. Viola L. Pennypacker, Huntington, Dr. Wm. C. McCord, Huntington, (transferred from Butler Co., Pa. Society), Dr. W. S. Reece, Beale, W. Va.

In addition to these, five applications for membership were presented and referred to the Board of Censors. Fraternally yours,

JAS. R. BLOSS, *Sec'y.*

GREENBRIER VALLEY SOCIETY.

MARLINTON, W. VA., Feb. 15, 1913.

The Greenbrier Valley Medical Society met in Ronceverte, February 12, 1913, and organized for the year with Dr. N. R. Price, of Marlinton, president; Dr. T. C. McClung, of Ronceverte, secretary, and Dr. Jackson, of Ronceverte, treasurer. The next meeting of the Society, of which due notice will be given, will be held in Ronceverte early in May, just prior to the meeting of the State Medical Association, which meets in Charleston this year. Drs. Parker and Curry, of Ronceverte, were appointed delegates to represent the Society at the annual meeting of the State Association. N. R. P.

LITTLE K. & OHIO VALLEY SOCIETY.

The Little Kanawha & Ohio Valley Medical Society met at the Chancellor Hotel February 6th in the regular monthly meeting with Dr. Link in the chair. Dr. Sharp secretary pro tem, reported that the committee appointed to draft a memorial to the legislature and authorities relative to increased appropriations to the work of the State Board of Health that it might be more efficient along lines adopted in progressive states, had done the duty assigned—and that Governor Glasscock had recommended such action in his message.

Other routine matters were attended to. The next meeting will be March 6, when the Society hopes to have Dr. F. L. Hupp, president of the State Medical Society, with us and give a paper. The quarterly banquet will be held at that time.

Dr. Sharp, in the absence of Dr. Goff, essayist, because of sickness, read his paper on "Blood pressure." It was a lengthy and very interesting paper on this, a comparatively new subject. All were much interested in the paper. Dr. Link demonstrated the use of the instrument upon the various doctors present. Their blood pressures ranging from 135 to 170. W. H. S.

OHIO COUNTY SOCIETY.

Dec. 2nd, 1912.—Society called to order by President Schwinn. Fifty-five present. Dr. Lawrence Litchfield of Pittsburgh read a paper on "Practical Observations on the Management of Cardio-renal Cases Exhibiting High Blood Pressure." (See Jan. Journal). Discussed by Drs. Dickey, Drinkard and Thornton.

Dec. 9th.—Society met with thirty-five present. Dr. Dickey read a paper on "Corneal Ulcers." (See Feb. Journal). Dr. Gaydosh read a paper on the "Use of Lobelia in the Treatment of Diphtheria." The doctor thought that he had seen good results from this treatment, in connection with antitoxin. The paper was discussed by Drs. Thornton, Campbell, Osburn, Hildreth II., Ackerman, Jepson, McLain, Wilson and Baird, all of whom were opposed to the use of this drug in the treatment of diphtheria.

Dec. 16th.—The regular meeting was adjourned that the members might attend the lecture of Dr. Wiley on "The Public Health Our Greatest National Asset." After this lecture the Society entertained Dr. Wiley at a smoker at which the doctor gave a very entertaining address. Thirty-five present. Adjourned until second Monday in January.

Jan. 13, 1913.—Society met with seventeen present, Dr. Schwinn presiding. A paper was read by Dr. Noome on "Bone Felon." Gave the anatomical structure of the finger, showing that necrosis of the diaphysis was due to pressure on the vessels supplying it. Said that the inflammation in felon is limited to the distal phalanx. The source of infection not always noticed. Symptoms are pain, at first stinging, later throbbing, with tenderness. At first tenseness of the phalanx, later fluctuation. Advises early incision into the infected cavity, cutting along the side of the finger rather than in front. Drainage and the use of aseptic vaselin. Dr. Ackermann said that the cuticle of finger is thick and not freely moveable. Felon due to finger infection. Urged early incision and drainage. Sterile vaselin a valuable adjunct. Alluded to the danger of the infection spreading to the tendon sheaths. Dr. Schwinn urged the use of local anesthesia; the nerve on each side of the finger should be frozen and novocain injected into it, thus rendering the site of the incision anesthetic. Drs. Hall, Drinkard, Taylor and Noome further discussed the paper.

Dr. Andrew Wilson gave a resume of the work done at the Tuberculosis Sanitarium. Thirteen of twenty-four patients much improved, two improving, and three recently admitted. A number had gained rapidly in weight. But little medical treatment was given. Depend largely on outdoor life and liberal diet. Report discussed by Drs. Hildreth II., Schwinn, Jepson, and Drinkard, who spoke of the educational value of the institution, both to the patients and to those with whom they should come in contact after their discharge. Adjourned.

J. EDWARD BURNS, *Sec'y.*

Reviews

SEXUAL IMPOTENCE. By VICTOR G. VECKI, M.D., Consulting Genito-Urinary Surgeon to the Mount Zion Hospital, San Francisco. Fourth edition, enlarged. 12mo of 394 pages. Philadelphia and London. W. B. Saunders Company, 1912. Cloth, $2.25 net.

This most splendid book, by Victor G. Vecki, M. D., which is the fourth edition, enlarged, includes all the phases of sexual impotence. It is as interesting as it is instructive from the preface of the various editions to the end of the treatment. In fact to read and assimilate the introduction alone, compensates one for the time spent. Without dwelling at length on the various chapters, which are all interesting, instructive and written in such a logical manner, I especially mention Chapter VII. on Prophylaxis and VIII. on Treatment, which show what a master the author is on the subject.

I heartily recommend this beek as a most suitable work on this subject.—H. P. L.

ARTERIOSCLEROSIS, ETIOLOGY, PATHOLOGY, DIAGNOSIS, PROGNOSIS, PROPHYLAXIS, AND TREATMENT, WITH SPECIAL CHAPTER ON BLOOD PRESSURE. By LOUIS M. WARFIELD, A.M., M.D., Assistant Superintendent and Resident Physician to Milwaukee County Hospital. Introduction by W. S. THAYER, M.D., Johns Hopkins University, Illustrated with twenty-eight engravings. Octavo, 220 pages with Index. Second Edition. C. V. Mosby Company, Publishers, St. Louis. 1912. Price $2.50.

We know no other book that exactly covers this field. The subject of blood pressure is commanding increasing interest, and life insurance companies are requiring their examiners to inform themselves, that their tests may be of value in determinating risks. In no other work can these examiners or other physicians so well inform themselves. The chapters on Physiology and Pathology have been rewritten, and two chapters added, one on "The Physical Examination of the Heart and Arteries," and one on "Arteriosclerosis in Its Relation to Life Insurance." This is of decided practical value and the practitioner will find it decidedly useful in giving light in the study of kidney, heart and other diseases often encountered in daily practice.—L. E. N.

UNCOMPLICATED PREGNANCY AND LABOR. By FINLEY ELLINGWOOD, M.D., author of "Materia Medica," "Practice of Medicine," etc.

This is a duodecimo volume of 160 pages. It assumes to present a simple, scientific method of treating the disorders of pregnancy, and to prevent the complications of labor, and thus to render the pain of labor much less severe. The advice given is generally good, but with so many works dealing much more fully with the subject here but briefly treated, there seems to be no urgent demand for such incomplete treatises.—S. L. J.

INTERNATIONAL CLINICS. Vol. IV. 22d Series, 1912. J. B. Lippincott Company, Phila. $2.00.

This is the latest of this valuable series which has now passed its "majority," and fully earned its right to live. It is an octavo of over 300 pages with papers on diagnosis, treatment, medicine, surgery, gynecology, etc. The series can be highly commended. The contributors are among the ablest of this country and Europe.

TEXT BOOK OF GYNECOLOGY. By WILLIAM SISSON GARDNER, M.D. D. Appleton & Co., New York and London.

This book of Dr. Gardner will be welcomed by his many W. Va. friends. It is somewhat elementary, treating in a very clear way the more common diseases of women. The writing is concise but not at all cloudy. Theoretical discussions are not found in the book which is throughout very practical. It is well illustrated, many of the pictures being from photographs of pathological lesions. Evidently the book draws largely on the author's personal experience which has been quite large. We have many larger books on gynecology than this, but the busy man in general practice will learn much by a close study of this book in which there are few useless words.

PSYCHANALYSIS: ITS THEORIES AND PRACTICAL APPLICATION. By A. A. BRILL, Ph.B., M.D. Chief of the Neurological Department of the Bronx Hospital and Dispensary; Clinical Assistant in Psychiatry and Neurology at Columbia University Medical School. Octavo of 337 pages. Philadelphia and London. W. B. Saunders Company, 1912. Cloth, $3.00 net.

Dr. Brill has done the general profession of this country a distinct service in putting forth this book. Outside the circle of those who give special attention to nervous and mental diseases there has been a vague knowledge only of the psychological principles that may be summed up in the phrase, "The Theories of Freud," principles which have been criticised adversely on one hand and on the other accepted with an enthusiasm which seemed unwarranted to the man in the street. This book under review presents the practical application of Freud's theories, and it is bound to remove false conceptions concerning them and it will undoubtedly stimulate further interest in the epoch-making works of Sigmund Freud. Doctor Brill has touched only the high places in his survey, and this is all that could be done in a work of this extent, but he has done it effectively, with clear vision, with a sense of perspective and in an entertaining manner. The headings of the chapters will give some idea of the wideness of the field embraced in the work; they are as follows: THE PSYCHONEUROSES;

DREAMS; THE ACTUAL NEUROSES; THE COMPULSION NEUROSES (OBSESSIONS, DOUBTS, PHOBIAS); PSYCHANALYSIS AND THE PSYCHOSES; PSYCHOLOGICAL MECHANISMS OF PARANOIA; PSYCHOPATHOLOGY OF EVERY-DAY LIFE; HYSTERICAL FANCIES AND DREAMY STATES; THE OEDIPUS COMPLEX; THE ONLY OR FAVORITE CHILD IN ADULT LIFE; ANAL EROTICISM AND CHARACTER; FREUD'S THEORY OF WIT; INDEX.

It is easy to convict many critics of Freud of complete ignorance of the views they imagine themselves to be criticising. Such ignorance will be no longer excusable even for those practitioners who do not read the German language. With Doctor Brill's work now at hand to give to the English reader the opportunity of obtaining a clear view of the Freudian psychology, a therapeutic help, there is no further excuse for further ignorance. Moreover, there is just off the press of William Wood and Company, a volume on this same topic, "Psycho-analysis," by Dr. Ernest Jones, of Toronto, which covers in a most detailed and practical fashion those chapters in Dr. Brill's book which are of special value to the general practitioner. In both the works cited above ample bibliographies and references are given for those who desire to pursue the subject still further. C. A. W.

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume I. No. VI. (December) and Vol II. No. 1. Octavo 179 pages. Octavo of 152 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1912. Published Bi-Monthly. Price per year, paper $8.00, cloth, $12.00.

No current publication surpasses in interest Murphy's Surgical Clinics and the December and February numbers are especially attractive. The first is devoted largely to breast carcinoma and malignant tumors, with a continuation of the clinic on joint and bones. It contains also the index to the first six numbers, which suggests binding into one volume this most valuable and popular publication.

In the first number of the Clinics for 1913 Dr. Murphy divides honors with Mr. Arbuthnot Lane, who presents to American surgeons through this medium his perfected technic in fracture treatment by the bone plates, and the exact indications for their use. The operations as performed by Lane are extremely instructive. Many good things by Dr. Murphy follow, the most notable being his treatment of tuberculosis joints and his discussion of appendicitis from a diagnosis view-point. R. J. R.

"My doctor told me I would have to quit eating so much meat." "Did you laugh him to scorn?" "I did at first; but, when he sent in his bill, I found he was right."—*Washington Star.*

Medical Outlook

CUT THIS OUT AND SEND IT TO SOME FELLOW PHYSICIAN NOT A MEMBER OF HIS COUNTY MEDICAL SOCIETY.

Why you should join your county medical society.

1. Because it is a post-graduate school at home from which you will derive pleasure and increase your practical and scientific medical knowledge from the papers read, the discussions and clinical reports, making you a better and more successful practitioner.

2. Because it is the best means to promote friendships, mutual respect and pleasant social relations in your professional life.

3. Because it is the best means of avoiding envy, jealousy, local animosity and internal dissensions which have always discredited our profession, and if you will permit them, will seriously damage your professional career.

4. Because it will help you to improve your financial condition by aiding you to better your business methods in your work.

5. Because it tends to promote unity by which the profession gains in influence and commands a higher respect from the community.

6. Because the County Medical Society makes it possible to unite the profession into a compact organization to its material advantage and that of each of its members.

7. Because it will enable you to progress in your medical career and become a member of the State and National Medical Associations.

8. Because you owe all this to yourself and to your professional co-workers.

Therefore: Join your County Medical Society. "In union there is strength."—*From Colorado Medicine.*

The following is a simple and unusually satisfactory operation for ingrown toe-nail that has progressed beyond palliative treatment: Beginning at the free magin of the nail about a quarter of an inch from the offending side, with straight, strong, narrow-bladed, probe-pointed scissors cut through the length of the nail and continue *under the skin*, directly through the root. With forceps loosen and lift out the narrow segment of nail root complete. Be sure no fragments remain. The operation is brief and the pain, even if no anesthetic is used, is not very severe. Lightly pack the narrow wound. If there is much infection apply a wet dressing, otherwise a simple pledget of gauze fastened with adhesive strips. The patient can at once walk with comfort in his street shoes, and the after treatment is trifling.—*American Journal of Surgery.*

SALVARSAN DEATH.—DR. RUH, pathologist of Lakeside Hospital, Cleveland, reports a death occurring five days after an intravenous injection of salvarsan. An autopsy was held. The doctor gives the following summary of the case:

1. In a case having a positive Wasserman reaction and clinical signs of lues, after the intravenous injection of 0.5 gram of salvarsan in alkaline solution there followed an anuria which resulted in death after five days.

2. At autopsy there were found evidences of a severe intoxication.

3. The main effects are seen in the kidney and liver, which show degenerative changes and proliferation of the parenchymatous elements.

4. The pathological changes in the liver and kidney are similar to those produced in experimental arsenic poisoning.

I wish to thank G. W. Crile for the privilege of using the clinical records of the Surgical Service of the Lakeside Hospital, and O. T. Schultz for valuable suggestions and the preparation of the microphotographs.—*Cleveland Med. Jour.*

RULES FOR THE MANAGEMENT OF POLIOMYELITIS.

PROMULGATED BY THE CALIFORNIA STATE BOARD OF HEALTH.

1. Acute poliomyelitis should be regarded as an infectious disease and quarantined accordingly.

2. The period of quarantine shall be thirty days dating from the onset of the disease.

3. Premises shall be placarded as in other quarantinable diseases.

4. No persons, other than doctor, nurse or clergyman, who shall come in contact with the sick, shall enter or leave the premises.

5. Contacts and suspects shall be kept under observation for twenty-one days.

6. Cases must be reported to the local sanitary authority and by it to the State Board of Health. Every effort should be made to trace possible means of communication, especially when the disease first occurs in any locality. Use federal blank obtainable from State Board of Health.

7. The same precautions should be taken in the care and management of poliomyelitis as in the case of other infectious diseases, of which scarlet fever is suggested as the type.

8. Special attention should be given to discharges from the nose and mouth. These should be caught on material that can be burned or in vessels containing a disinfecting solution. Urine and feces should be sterilized before being placed in closets.

9. Domestic animals should be rigidly excluded from the sick-room and from all infected premises.

10. Before release from quarantine, the patient's and attendant's clothing and premises must be disinfected in accordance with standard methods.

11. In the presence of an epidemic, it is wise to forbid the congregating and assembling in any manner of children under 15 years of age.

12. Where the disease is prevalent, it is a safe precaution, where possible, to keep children strictly confined to their own premises, and in every case to avoid entrance of contacts.

A BISMUTH PASTE SUBSTITUTE.—DR. BLANCHARD, in the *Medical Record*, discourages the use of bismuth paste in the healing of sinuses on account of the many cases of resulting poisoning reported. He offers the following as a reliable substitute:

White wax, 1 part; vaselin, 8 parts; mix while boiling.

Iodine may be added in badly infected cases. Iodine scales can be reduced to a powder by the addition of 20 per cent potassium iodide. One, two, or three grains may be put in a small cup. The usual glass syringe should be filled with the hot paste. Half the contents of the syringe must now be injected into the cup and the nozzle of the syringe used to mix the iodide powder into the hot paste. When this mixture is drawn into the syringe the fresh iodine is rather unevenly distributed in the hot paste and it is ready for use. Immediately after injecting the sinus a thick pad of gauze saturated with alcohol should be bound over the opening. The evaporation of the alcohol cools and hardens the paste and prevents its escape. In some cases it is well as a preliminary step to get a skiagram showing all the sinus ramifications and pus pockets. For this purpose Blanchard is injecting sinuses with the following mixture: Ferric subcarbonate, 1 part; white vaselin, 2 parts; mix and boil.

The iron makes a good skiagram for diagnostic purposes as the bismuth, without its dangers.

THE ROENTGEN-RAY IN THE DIAGNOSIS AND CONTROL OF FRACTURES.—JAMES W. HUNTER, JR., M.A., M.D., Norfolk, Va., in *Va. Med Semi-Mon.*, Jan. 10, 1913.

Dr. Hunter shows up the many difficulties the surgeon must encounter in diagnosing and managing cases of fractures. Ordinary examinations are often perfect failures. Pain is misleading, appearances are often faulty, crepitus is not easily obtained and when great effort is made to obtain it, a greenstick fracture may be converted into a complete one, or an impaction into a false joint. The Roentgen-Ray, if properly managed shows every condition. It should be used from more than one position. By it we can watch the process of repair. It is especially useful in determining results of operations for fracture. It protects the surgeon against legal measures which unscrupulous patients may sometimes resort to.

G. D. L.

RESTORING MOBILITY AFTER BONY ANKYLOSIS OF THE JOINTS.—R. TUNSTALL TAYLOR, M.D., of Baltimore, in *Penn. Med. Jour.*, Jan. 1913.

Dr. Taylor injects into such joints; yellow wax, 1 part and lanolin, 2 to 6 parts. This mixture melts between 120° F. and 135° F. and solidifies within the body and is, in time, completely absorbed. We give his conclusions in his own words: "The advantages of his method, the writer claims, are, primarily, the prevention of the reformation of bony adhesions in properly done cases; the absence of pain, none of the above re-

quiring any anodyne; the speedy, voluntary ability to move the joint as compared with other methods; the absence of fever and suppuration; the hemostatic effect of the wax prevents the formation of hematoma and ecchymosis; and the rapidity with which the operation can be done, compared with other methods. G. D. L.

RECTOSIGMOIDSCOPY.—No rectal examination is complete without a proctoscopic inspection. The endoscope alone makes possible the diagnosis of the pathologic condition of the upper rectum and pelvic sigmoid. It is the only method by which an early malignant lesion may be detected. If more general advantage were taken of its benefits and earlier diagnosis made, hand-in-hand with the well-recognized low malignancy of growths in the lower bowel, an amazing increase would result in the number of permanent cures."—A. C. STRACHAUER, M.D., in the *Journal-Lancet,* Minneapolis. G. D. L.

LIBERAL FEEDING IN TYPHOID.—BERNARD KOLIN, M.S., M.D., in *Penn. Med. Jour.*

Kolin adds more testimony to already increasing volume of this subject. He claims only 34 cases with one death and that was of nephritis. The febrile period after admission to hospital varied from 2 to 54 days, average being 19 days. The total average duration of the disease was 32 days. Relapses in six cases; hemorrhage in three cases. Complications were: Myocarditis, three cases; otitis media, one case; bronchitis, one case; nephritis, two cases. He feels reasonably sure that one patient with myocarditis would have succumbed had it not been for increased resisting power from the liberal diet.

From my own observations and what I gather from experience of others, I have come to the conclusion that the physician who keeps his patients on a milk diet is behind the times.

G. D. L.

IDIOSYNCRASY TO COMMON FOODS.—EDWIN HENRY SCHORER, M.D., Kansas City, Mo.

This is the title of a paper read before the Jackson C., Med Soc. and published in *Jour, Missouri State Med. Asso.*

Dr. Schorer gives numerous instances where food, as strawberries, cheese, oatmeal, crabs and lobsters, eggs, almonds, barley meal, rye, rice, certain nuts, bananas and meat produce various kinds of disturbance, as nausea and vomiting, indigestion and skin eruptions. He regards these idiosyncrasies of importance because of the disturbance produced and because of the interference at times with feeding children and sick adults. He says, "prophylactic measures against the condition seem possible. Eggs, oatmeal are specially prone to sensitize so that for the past two years I have tried to eliminate these foods from the diets of children until they can take them regularly. In this I have succeeded by using skimmed milk in place of egg albumen and rice and barley water in place of oatmeal water" He speaks of attempts to immunize such patients by beginning with very minute quantities mixed with other foods and gradually increase them. It has been done in a number of cases with success. By the way, the writer of the abstract has an idiosyncrasy to one article of food only, and that is one which he has never seen mentioned in the literature nor has he ever personally known or heard of a like case. The smallest portion of a beet, whether cooked, raw or pickled will induce immediate nausea and a very little more will act as a powerful emetic.

If any physician who reads this knows of any similar case, the writer will be much pleased if he will communicate the same to this Journal.

G. D. L.

SURGERY OF INCIPIENT PULMONARY TUBERCULOSIS.—The 41st Congress of the German Surgical Society was held in April of this year in Berlin. Among other interesting papers read was one by W. Kausch of Berlin, who reported his results in Freund's operation in apex tuberculosis and appearing under correspondence in the *Medical Record* for August 31.

Of the nine cases receiving surgical treatment, five had been operated on by Kausch, who affirms that the operation is uniformly satisfactory and free from danger for cases in which the disease does not extend below the second rib. Marked improvement and cure followed and has been permanent three and four years after the operation.

F. LEM. H.

FRACTURE OF THE PATELLA. W. E. HARWOOD, Eveleth, Minn., *The Journal-Lancet,* July 15, 1912.

The author summarizes the treatment of this injury as follows:

1. Simple transverse fractures with less than one-third of an inch separation of the fractures, with a small amount of joint effusion, and without interposition of any tabs between the fragments, should be traced conservatively.

2. In simple fractures in which there is greater separation than one-third of an inch, a great amount of distension, and interposition of tabs, and where the patient cannot raise his heel from a straight level, an open operation should be done, if the case is in the hands of a surgeon thoroughly trained in asepsis and under rigid aseptic conditions.

3. All compond fractures must be operated on.

4. Massage of the quadriceps is commenced two or three days after the injury. Three weeks later the patella itself and the entire leg are massaged, and guarded passive motion used. Four or five weeks after the injury active motion is attempted.

5. Ankylosis will disappear without the forcible breaking up of the adhesions.—*Am. Jour. of Surgery.*

"Did he pay you for the false teeth you made for him?" "Pay me, no, and what's more, he had the effontry to gnash at me—with my teeth."

Miscellany

MEDICAL JOURNALS AND FRAUDULENT ADVERTISING.

The following resolution was introduced at a meeting of the *Mo. State Med. Association* recently. It is an indication of the trend of opinion among doctors in regard to this important matter:

WHEREAS, The Amer. Med. Assoc. has been doing effective work to counteract the influence of certain medical journals whose advertising pages carry many fraudulent advertisements, therefore, be it

Resolved, That it is derogatory to the best interests of the Mo. State Med. Assoc. for members to publish articles or papers in medical journals which are not in sympathy with the purposes of this organization, and, further

Resolved, That members are hereby requested to cease publishing original articles or other matter in journals whose advertising pages contain fraudulent and questionable advertisements and give loyal and constant support to the Jour. Mo. State Med. Assoc. G. D. L.

A SYRUP WITH MAPLE SUGAR FLAVORING.

At this time, when so much is being said about the high cost of living, it may be interesting to note that a West Virginia man has patented what he terms a saccharine article of commerce which is composed of sugar and an extract obtained from the outside lifeless bark of the rock or maple sugar so that the syrup will have a maple flavor. In the process of making this article, the outside lifeless bark taken from the trunk of the rock or sugar maple tree is boiled in water until an extract of the desired strength is obtained and the liquid is then strained and commercial sugar added and boiled until the strength is satisfactory.—*Am. Practitioner.*

(This syrup is without honor in its own country. We never heard of it.—EDITOR.)

Let us look into only one book, going back only two and one-half centuries. It is "art of distillation and alchemy," by J. French, doctor in physic, published in London in 1659. It was a popular book amongst the learned physicians of that period. In it I find the methods of manufacturing various remedies such as "Elixir of Mummies," "Essence of Man's Brains," "Spirit of Human Skulls," "Eye Water of Woman's Milk," "Balsam of Bears' Feet," "Water of Sperm Frogs," "Wine of Fat Vipers." Under the heading, "Essense of Man's Brains" we read: "Take the new branes of a young man that hath dide a vilent deth, together with its veins, membranes, and arteries, and nerves, together with all the pith of the backbone. Bruise them in a stone mortar till they become as a kind of papp; then put as much of the spirits of wine as will cover three or four fingers' bredth; then putt it in a large glass, that three or four part be empty, sealed hermetically; then digest it half a year in Horsee's Dung; then take it out and distil it in Balneo; then cohobate (What is it to cohobate?) the waters till the gratest part of the branes be distilled off." "A scruple or a drop or two is a most infallible Remedy against the Falling Sickness."

I spare you further quotations from this book that was once ranked, and that only 250 years ago, amongst the sanest and wisest books in the world.—*Rev. Dr. Fishburn in Southern Cal. Practitioner.*

MEDICAL ETHICS.

A St. Louis physician before a class of graduating students gave voice to regret that the ethics of the medical profession forbids a medical man to advertise. Commenting on this the *Jour. Mo. State Med. Assoc.* says:

"If the outrageous spectacle of a physician preaching the doctrine of dollars and cents to a graduating class of medical students emphasizes one thing more than another it is the medical ethics in medical schools. Hasten the day when the morals of medicine will cease to be regarded as superfluous in the curriculum, but will be as carefully guarded and as faithfully taught as are the therapeutic doctrines."—G. L. D.

"The cults will not last, because they are not built upon an entirely sound and certainly not upon a scientific foundation. But they will do one good thing before they go and this, I believe, is their principal function. They will teach the physician, within the reach of their influence, the importance of mental, moral and spiritual facts in relation to health. It has taken a mightly social convulsion to move us, but the movement is being done and we will be all the better for it."

The "cults" referred to above are Christian Science, The Emmanuel Movement and The New Thought, and this is an extract from an address to the graduating class of Georgetown University by Wilfred M. Barton, M.D., of Washington, D. C.—G. D. L.

CAN LIVING BACILLI BE PATENTED?

Klemperer *(Therapieder Gegepwart)* states that Friedman's application for patent protection on his turtle bacilli is very comprehensive; he seems to seek to monopolize the entire field of treatment of tuberculosis with living bacilli. He claims "discovery," and the application speaks of the "discoverer applicant," which Klemperer regards as rather far-fetched. What was it Friedman "discovered?" Turtle bacilli? Friedman was the first one to find them, but any one else can find them now by looking for them. Will he claim patent protection on all the bacilli found on turtles henceforth? And the methods of cultivating, attenuating, etc., these bacilli—the technic familiar to every bacteriologist—will Friedman claim patent right over these? Application for a patent on living creatures of bacteria is "something new under the sun," and the outcome of the application will be awaited with intehest.—*Jour. A. M. A.*

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Original Articles

AFTER TREATMENT OF SURGICAL OPERATIONS.

C. S. Hoffman, M.D., Keyser, W. Va.

(Read at Annual Meeting of State Med. Ass'n, July, 1912).

In presenting this paper it is not my intention to impress anything new upon those of you who have established yourselves in surgical work and have formed methods, gained, perhaps, by years of experience, but for those who contemplate doing surgical work, and more especially as a possible guide for those into whose hands the patient falls after an operation, and who assume the responsibility of the after care which often carries with it more skill and good judgment than is required of the operator. When Dr. Crandon devotes a book of over eight hundred pages to this subject, I hope I may be pardoned for imposing this paper upon you.

When I first began to do surgical work, and especially abdominal surgery, but little of a positive nature was said of the after treatment, possibly for the reason that so little at that time was definitely known. Operations which at that time were considered extremely hazardous, are now approached with intrepidity, and after conditions which then seemingly justified an unfavorable prognosis, are now looked upon with little apprehension. It is no wonder the mortality then was high, as the standard of the after treatment was low, and even at this present time the instructions on the after treatment of surgical cases in some of our standard text books are often inadequate, not clear, and the man who has not had ample hospital experience is often handicapped, and the life of the patient probably sacrificed, by his inability to bring to a safe recovery cases which, under the care of the more experienced, would have terminated favorably.

The battle is not nearly fought nor the victory won when the operation is performed. Often the greatest skill is required in the after treatment. I am speaking from personal experience gained by personal surgical work done. Often much more favorable results can be accomplished in the after treatment of surgical cases by the intelligent pre-treatment. In accidental surgical cases, however, we are often confronted with a condition requiring the nicest judgment and immediate action to influence cases and bring them to a favorable termination by our after treatment. Not every crushed arm or leg should be amputated at once, as this will often add to the already existing conditions of shock and only help to destroy the patient and bring into disrepute the after treatment. The after results are much better in many cases if we wait until the patient rallies from the depression, or shock, which may be from a few to twelve or twenty-four hours. If, however, the patient is in fairly good shape, not too much shocked, with a pulse of fair volume, fairly good heart action, with both sounds audible, to operate is proper and the after treatment will, probably, be very simple indeed. But with much shock, manifested by a cold, clammy skin, sighing respira-

tion, much thirst, little expression of pain, dilated pupils, bad heart action, manifested by either too frequent and too small or too slow and too soft a pulse, it is wise to administer anodynes and stimulants until there is sufficient rallying of the general system to justify an operation and make successful the after results of the case. In some few cases where the shock is added to by the continual pressure upon a nerve or the projection and irritation of a bone, or other foreign body, into the soft parts, there is no alternative but immediate operation. The after treatment is simple in all those cases where the injury is not serious and the operation is followed by little shock, requiring practically nothing more than the occasional dose of morphin to relieve the acute pain. These patients are, in a few hours, ready to eat, and in a few days are convalescent. Not so, however, with the more dangerously injured especially if there is great shock, or much loss of blood. It is these desperately injured cases which call for the best judgment of the surgeon, and each is always a case unto itself. If it is decided to operate at once the patient should be prepared for it as carefully as possible. He should be surrounded with warm blankets and hot water bottles, all wet or damp clothing being removed at once. If the patient is very weak the extremities should be bandaged, warm salt solution should be injected into the rectum (which possibly may be too relaxed to retain it) or under the skin, the 1-20 gr. of strychnin and 1-30 gr. of digitalin should be given by hypodermic. The head of the patient should be lowered. I have often operated with my patient's head as low as I could get the operating table. The anesthetic should be ether. After a severe operation for injury I have sometimes kept my patients on the operating table with their heads very low for an hour or more, keeping their rectum full of a salt solution, and where this could not be retained, using the salt solution under the skin. If much shock follows the operation and the patient is very weak, the head should be kept continuously low by elevating the foot of the bed, the bandages retained on the extremities, hypodermic injections of 1-80 gr. strychnin sulph. and ⅛ gr. spartein sulph. may be given every two hours until the effect is perceptible upon the pulse. If the shock and depression are great, a hypodermic of ergotol, or oil of camphor or adrenelin should be used, or a rectal injection of 20 grs. of carbonate of ammonia. The ergotol and ammonia are especially to be recommended. Salt solution by the drop method per rectum should be continued. If the rectum will not retain it, hypodermoclysis should be used. It is often surprisingly astonishing what a successful fight can be put up in these cases, snatching, as it were, the patient from the very jaws of death, as I have seen on more than one occasion. In all cases of depression or shock where there is much pain, morphin judiciously administered generally gives most gratifying results; in fact, it is one of the very best shock reducers known and should be used with much confidence in this class of cases, especially where there is pain. These medicines are all stopped as soon as the patient has sufficiently recovered.

After all amputations of the extremities, except that of the phalanges, I mostly use rubber drainage tubes, removing them in about forty-eight hours, at which time the wound is carefully washed out with sterile or weak bichloride water. Following operations for fractures of the skull I usually drain with iodoform gauze. In a severe case of compound fracture of the right frontal bone, where there was loss of considerable brain substances and the exposure of about 2½ inches square of the brain, I applied a sterile sheet of dentist's gold foil over the brain, and over this brought the dura mater and skin. The result was perfect. The patient left the hospital in two weeks in perfect health, and in one month was at work.

Following all injuries of the brain or its membranes, I pursue the usual methods of giving 10 grs. of urotropin three times a day for a few days for its supposed antigermicidal action.

By carefully studying the patient's condition and applying judicious treatment I am sure the lives of many persons can be saved which otherwise would be lost. I remember the gratifying result of a hip joint amputation of a man who was in a bad condition. There were several physicians pres-

ent, all of whom gave an unfavorable prognosis. Some days later when the man was well on the road to recovery, one of these physicians said to me that the patient owed his life to my persistent effort and treatment. While waiting at the depot, at my home, for the train to bring me here, I was approached by a young man of robust physique whose arm I had removed at the shoulder joint some year ago. At the time of the accident his arm had been crushed and his side badly bruised by a railroad injury which had occurred thirty or more hours previous to my seeing him. As death was inevitable in the bad condition in which I found him, and contrary to the advice of three physicians, who insisted that he was too weak to survive the operation, I advised immediate operation as his only hope. With his extremities bandaged and his head as low as I could get the operating table, his arm was removed. The loss of blood and shock were so small that little after treatment was required. He made a good recovery.

After abdominal operations all wet clothing is removed. The patient is put into a warm bed, with hot water bottles to feet, legs and body, and the covers so adjusted as not to provoke profuse sweating. If there is much shock the head is kept low until the shock passes off, when the head of the bed is raised about eighteen inches above the level. If there is not much shock, the head of the bed is raised at once and kept so until the bowels move. The raising of the head of the bed seems to help to prevent nausea, by gravitation probably, and favors downward intestinal peristalsis. Following all abdominal operations, unless there is positively no indication for it, it is my custom to give by hypodermic 1-80 grain strychnin and ⅛ gr. spartein sulph. every two hours, commencing as soon as the patient is placed in bed and stopping as soon as I feel it no longer necessary. I give these medicines to prevent shock and to start up kidney secretions. As soon as the patient is sufficiently conscious to retain it, salt water solution per rectum, by the drop method, should be commenced, regulating the tube so that about one pint will flow into the bowel every hour. Possibly not every case requires the use of this solution, but I believe all patients do better where it is used. For the injection of salt solution it is not necessary to possess an elaborate outfit. An ordinary douche bag and tube, a small male catheter and a pair of haemostats to compress the tube until only a drop of the solution is emitted at a time, are all that is required. The bag can be suspended from the head of the bed. To keep the water warm as it flows into the bowel, the tube can be weighted in a bucket of hot water which can be replenished as soon as it cools, or better, a hot water bag filled with hot water and bound with a towel to the bag which contains the salt solution. This bag can be replenished with hot water as often as it cools. It is surprising what large quantities of salt solution the system will at times absorb, and with apparent benefit. I remember a very weak, relaxed, anemic, jaundiced woman, from whom I removed a large gall stone from the common duct, who absorbed with advantage one pint of salt solution every hour for forty-eight hours, until, in fact, she could, as she said, taste the salt in her mouth. The salt solutions are stopped as soon as we feel that the patient has fully recovered from the shock and general effects of the operation. If the patient suffers much pain, as many do after abdominal operations, I give codeine sulph. grain one by hypodermic as often as necessary. My experience with codeine is, that it relieves pain and does not provoke vomiting or constipation. It is rarely that I ever resort to the use of morphin. Especially do I want to recommend to your confidences the use of codeine sulphate. It does not stop intestinal peristalsis. There are often cases where the pain is so intense that morphin is required, but the objection urged against its general use is that if there has been injury to the peritoneum, its quieting effects on the peristalsis of the bowels favors intestinal adhesions, an objection which I do not believe can be urged against codeine.

How soon after an operation should we allow a patient to drink water? In this connection I would remind you that the usual condition of the stomach, after giving an anaesthetic, and especially ether, is one of non-absorption, and as the stomach is usually loaded with an ether-saturated secre-

tion, it is not only useless but harmful to add anything more to an already over-taxed non-absorbable organ. However, some operators advise giving liberally of water after the operation, while other advise not allowing anything per mouth for twenty-four hours. Different patients differ in this respect. I have seen patients take water to advantage as soon as they become conscious, and retain it. A patient of mine from whom a large ovariam tumor was removed was frantic for cold milk soon after the operation, and could not be controlled until she had a large tumblerful every three or four hours. These cases, however, are the exceptions. The best plan is to let the patient rinse the mouth as often as he wants to with cold water (not ice water) until the stomach become quieted from the effects of the ether, which may be from a few to twenty-four hours, when tablespoonful doses of hot water or cold water can be commenced, and if tolerated, can be increased in amounts as required. Sometimes small pellets of ice can be swallowed with relishing effect, but as a rule ice and ice water increase the thirst.

After all abdominal operations we expect some nausea and vomiting, but sometimes it is so persistent and intense as to exhaust the patient and tax to the utmost the resources of the attendant. If I have a suspicion, from the character of the case, that there may be much accumulation of secretion in the stomach, I often wash it out before removing the patient from the operating table. Should there be much nausea and vomiting following the effects of the ether, nothing has acted better for me than to give a Seidlitz powder, and repeat it in two hours if not relieved. If it is vomited it washes out the stomach, and if it is retained it seems to neutralize the contents of this organ. Should the vomiting still persist all liquids must be withheld from the stomach, the salt solutions per rectum continued, and nothing produces as good results as to wash out the stomach every three or four hours with bicarbonate of soda solution. In these cases of persistent vomiting with a tendency to acute dilatation of the stomach, to move the bowels works a magic. I have had most gratifying results often in these cases after washing out the stomach from giving at once ten grains of calomel on some scraped ice. It acts as a sedative and purgative. Contrary to withholding everything from the stomach, I have seen a few swallows of hot tea or coffee stop a vomiting, and in one patient who had persistently vomited for three days, the stomach was quieted in a short while by teaspoonful doses of orange juice, These cases, are, however, exceptions.

It is generally customary for the bowels to be moved on the third or fourth day, unless the operation is for a resection or perforation of the bowel, in which case it is usual to wait until the fifth or sixth day. The reason claimed for the early evacuation of the bowels is, that if there has been much injury to the peritoneum, stronger adhesions are likely to take place if purgation is too long delayed. Therefore it has been my custom to give on the second night following the operation one or two active cathartic pills, and the following morning, either the solution of magnesia citrate, or castor oil, or a phenolax wafer, every two hours until the bowels act. If the bowels are slow to respond, 1-10 gr. of calomel every fifteen minutes until three or four grs. are taken will generally give satisfactory results. While I give calomel at times I am not an advocate of it in all cases, as my experience has been that it will often provoke nausea and possibly bring on a condition of bowel spasm, instead of a normal peristalsis. Often, after giving cathartics, the patient will have an ineffectual desire to evacuate the bowel. Here a glycerine enema will generally be effectual. If the bowels do not respond to the cathartics and a resort to rectal enemas is necessary, a most effectual one is a pint each of milk and molasses. The one objection to this enema is, that it is dirty, and it is hard to determine from the color whether it is an evacuation of the bowel or a return of the enema. Of all the injections used, none is more effectual to bring on peristaltic action of the bowels than that of one ounce of alum to a quart of warm water. This injection is seldom disappointing. Enemas should rarely be given oftener than every three or four hours. As a rule an abdominal operation fairly well performed, with vomiting

controlled and the bowels opened by the end of the third day, convalescence can confidently be expected. A word in reference to high enemas. I doubt if they are ever accomplished without the aid of a Kelly speculum, and what we call a high enema is only the doubling up of the tube in the rectum.

Should peritonitis develop and an ineffectual attempt be made to move the bowels, then everything by the mouth must be stopped. The patient is given morphin hypodermatically as required to relieve pain, and is supported by rectal enemas every four hours of salt solution, with eggs, milk and liquid beef added, and is placed in the extreme Fowler position. It is surprising how many apparently hopeless cases will recover by this plan of treatment.

Unless stitch abscess develops, which is indicated by elevated temperature and increased pain at wound, the dressings are not disturbed until the eighth day, when, if the wound is well united, the stitches are removed, and the patient is allowed to change to the lounge or reclining chair. Of course this change should only be allowed in minor operations and where the patient is in good condition. A longer time in bed is required where the patient is weak and has undergone a serious operation. I have no patience with the idea of getting patients out of bed on the third day after the operation. It is not sound reasoning to think that one doctor has the ability to make a wound grow together more quickly than another, and we all know that a wound on the eighth day even is not as as sound as the tissues were before any incision was made.

As regards feeding, usually if the stomach is in good condition and no vomiting, the day following the operation, very small quantities of egg albumen or hot tea or coffee may be allowed, but after the bowels have been well moved, if the patient is otherwise in good condition, an early return to general diet may be allowed.

MEDICAL EXAMINATION

"Mary," said the man sick with smallpox, "if any of my creditors call, tell them that I am at last in a condition to give them something."

PARESIS, OR GENERAL PARALYSIS OF THE INSANE.

A. H. Kunst, M.D., Parkersburg, W. Va.

(Read before the Little Kanawha and Ohio Valley Medical Society, and by unanimous request submitted to the State Medical Association).

Having been most courteously invited to address you on some subject touching insanity, and at the same time kindly admonished to make the paper short, I have been more or less handicapped in deciding from what type of the great classification of insanity to select a theme that would be of greatest interest to you. After casting my eyes over the field, I have finally decided to use the few minutes allotted me in epitomizing the subject of General Paralysis of the Insane, or Paresis, as it is a disease with which the general practitioner has often to contend, at least in its first stages.

This disease has been recognized under the various names of "general paralysis of the insane," "dementia paralytica," "progressive paralysis," or, for brevity, "paresis." It seems that an hundred years ago it was scarcely known. That it has become much more prevalent now is fully borne out by statistics on the subject. In European countries it has been said that of the total number of admissions to the institutions for the care and treatment of the insane, during the past 15 or 20 years, about 30 per cent has been classified as cases of progressive paralysis. In our own country the per cent is not so glaring, as it ranges from 6 to 10 per cent of the whole number of admissions. However, it is claimed by creditable authority that for various reasons, not compatible with the length of this paper to discuss, that our own statistics are not as trustworthy as the European sources; notably that by the more affluent classes, usually relatives affected by mental disorder are kept at home as long as they are manageable.

Not many years ago it was relatively rare to find women affected by this malady, but now it is not infrequent, as the proportion of cases is about 1 to 7 or 8 in men, while in European countries it is much greater.

Berkley says: "Despite these facts the disease in most instances still passes unrec-

ognized by the general practitioner, at least in the early stages, when treatment, if to be of benefit at all, is imperative. Too often the condition is diagnosed as neurasthenia, hypochondria, general nervousness, or some functional malady of indefinite character." To cite further, he says: "Think twice before contenting yourselves with a diagnosis of neurasthenia in a man or woman who in middle life shows well defined reflex pupillary disturbances. The prognosis is ominous."

To give a case that is clearly illustrative, I feel emboldened to quote again from the same author:

"A gentleman, aged thirty-six years, the owner of a large wholesale business, was noticed by his family, in the summer of 1897, to be 'not quite himself,' in that there was now and then an unusual though transient irascibility and a tendency to forgetfulness. In 1898 these symptoms increased, and during the illness of his wife an emotional state not all warranted by her condition, was added. Incomplete paralysis of the internal rectus muscle of the left eye next occurred, for which he saw an oculist, and was provided with the usual glasses, and told that it would be necessary to have the muscles cut unless their use proved sufficient to correct the trouble.

"The course was now from bad to worse. The emotional state reached such a pitch that the patient became hypochondriacal, and was sent by his family physician to consult a medical man of note. A diagnosis of 'neurasthenia' was made, and the patient was treated accordingly, only with the result that the progress down ward became mare and more rapid. In the spring of 1899 mental symptoms of a character to alarm his family supervened, and the case came to me for consultation. A diagnosis of dementia paralytica at about the beginning of the second stage was made, and the family were warned of the prognosis. A few days later the man became maniacal, attempted to kill several persons, and probably would have succeeded in doing so had not all deadly weapons been removed. I elicited a history of a syphilitic infection ten years previously, also former excesses in alcohol."

In the etiology of paresis the consensus of opinion seems to be that at least a large percentage—say 70 to 90—is due to a syphilitic taint, and other causes have been assigned, as excessive alcoholism, traumatism, sunstroke and mental over-exertion. From my own experience in the larger proportion of cases that came under my observation a history of syphilis played an important part in the causation. While a large number of paretics have indulged in alcoholics, which no doubt contributed to a form of paresis, characterized as pseudo-dementia paralytica, this is not deemed the true type of the disease, but represents or fulfills what may naturally be expected from the degenerative effects of alcohol. While I do not wish to assum the position that alcohol may not be a causative factor, I am inclined to the belief that alcoholism is superinduced as a result rather than a cause.

One of the great authorities has characterized the disease as "that malady of life, the product of civilization and syphilization." Considered as a whole, I fully agree with the statement, though I would not have the temerity to assert that there might not be cases from other causes than those named. However, "as in tabes, syphilis is considered to be of pre-eminent importance in the origin of paresis," and it may be stated that the two diseases bear the relative relationship of first cousins.

All syphilitics do not suffer from paresis, but where from inheritance the brain is defective from birth, as is patent in so many phases of development, it must be considered—an acquired syphilis being added—that the result of the combination superinduces a degenerative process, and paresis usually supervenes.

Notwithstanding groups covering a large number of different symptoms have been accepted, for the purpose of this limited paper I shall adopt the one that appeals to my own ideas, so far as an epitome of the subject is involved, namely:

1st. The symptoms which prevail during the first and second stages of the disease.

2nd. Those that are exhibited by depression or hypochondria.

3rd. "Those without any marked degree of excitement or depression gradually pass into a condition of dementia."

These subdivisions are largely artificial, as the paretic may alternate between depression and exaltation, one day having the most extravagant ideas of wealth and grandeur, while the next day we may find him depressed, gloomy and morose, irreconcilable and dead to all overtures of sympathy and friendly interest. It is claimed that in recent years the demented forms are

more frequent, whereas formerly the buoyant ones prevailed.

The line of demarcation between the three periods that will be followed in this paper are hard to define, as one may run insensibly into the other, but it is not important so long as the practitioner recognizes the prodromal or initial stage, when, if medical treatment is adopted, there is a reasonable chance to combat the onslaught.

1st. The length of the first or prodromal stage may be of short duration, or it may extend over months, or even years. The patient is restless and shows unusual activity; is irritable, resents contradiction and assumes an air of superiority as to mentality and physical endurance, and in the vulgar parlance of the day thinks himself the "real push." He often loses his moral rectitude and engages in all kinds of excesses, even going so far as to commit thefts, drunkenness, violence, and in fact, he is incorrigible. No other type of mental disease elicits such an absolute form of degeneracy. He seems to have no well defined motive for these overt acts, and, however much he may be admonished or reasoned with concerning them, it is like pouring water on a duck's back, as the impression is ephemeral, as the acts of reasoning are obtunded and the evidences of dementia are patent by making an impress on the gray matter. There is now noticed an indifference or forgetfulness to the ordinary and accustomed duties of life. Among the most striking anomalies of this stage of the disease are the pupillary conditions already referred to, as a very large per cent of the cases show sluggishness or immobility of the pupils to light, even these anomalies have been observed years before the full development of the disease. In this stage, there may be attacks of vertigo and flushing or pallor of the face, and headaches are frequently noted. The circulation is often sluggish and troubles of digestion are not infrequent. yet the temperature may be only slightly above normal. Even speech defects are quite noticeable.

It can be laid down as a fairly important diagnostic solution, that a man who in the early middle life shows a recent alteration in his whole character, say restlessness, irritability, and an indifference to the needs of his fellows, and a pronounced degree of superiority over his associates, together with the pupillary disturbances noted, may safely be classed as a paretic or as fast approaching its borderland.

The transition from the first to the second stage is not well defined, but there is a slow and gradual decline of the mental powers. This stage is often ushered in by a strong and pronounced maniacal excitement, but these attacks may be transient or prolonged, and very often are characterized by the blind and unreasoning fury incident to the ordinary maniacs. There is sleeplessness, increased restlessness, a mental reduction out of all proportion to the maniacal stage. He now sees and views everything from the most extravagant and exalted standpoint. No scheme involving millions of capital staggers his resources. A thousand dollars is a mere pittance. He manages railroads, builds cities, personally conducts traveling circuses, his meals, though plain, are extravagantly lauded, everything in nature is just as he would have designed, and the great problems of life are a mere bagatelle to his erudite and broad mentality. His fancies are countless and most agreeable. He has innumerable wives, and the most beautiful and cultured women consider it an honor to be presented to him. He is, however, easily diverted from one delusion when another asserts itself, and there is no fixity in his ideas which are essentially sensuous.

I recall, with vividness, the history of a young business man of good family, who was committed to the institution of which I had charge several years ago, that will, in a measure, delineate the vagaries of this irreparable and awful calamity to which the human race has become heir. So far as the sentiment of his friends was concerned, he was regarded as a splendid citizen and a man of honor and integrity. For years he had creditably managed one of the most popular local hotels in the State, and perhaps no man in the State was better and more favorably known to the traveling public. His general habits were apparently correct, but he was addicted to the immoderate use of cigarettes, though he never indulged in alcoholic beverages. His age was about 40 years, the exact number I fail

to recall. He was married and had an interesting wife and child. Both of his parents, I have been informed, had suffered from mild attacks of melancholia, but it never became necessary to place either of them under restraint. The prodromal period in this case was first noticed in a reticent and gloomy disposition, which was a complete antithesis of his former condition. He finally became irascible, petulant and restless, manifesting no interest in the affairs of his hostelry, and left its welfare largely to the care of others. At first his friends attributed the markedly changed condition to overwork and excessive cigarette smoking. In time he developed a disposition to attend public sales where he purchased all kinds of useless articles, such as old cupboards, shelving, etc., and stored them away in a barn. Finally, he undertook the reclamation of a narrow strip of land bordering on the bank of a modest stream of water, and engaged skilled workmen to build a retaining wall of cut stone of substantial character sufficiently strong to support a ten-story brick building. After spending $2,000.00 in this seemingly reckless undertaking, his friends intervened, and stopped its further construction. I have understood, however, that in the final outcome the investment—though needlessly excessive—has proven to be a valuable asset. In the mean time, however, he had purchased the outfit of a small traveling circus, which had become stranded for the want of patronage: consequently, he had on his hand an useless outfit, such as it was. When interrogated as to his ideas of the expensive foundation, he graphically replied that he was going to have the finest flower garden, on the reclaimed lot, in the whole country. His family and friends now became aroused to the fact that his mind was becoming impaired, and though he was allowed to travel from place to place in the hope that he might be benefitted thereby, the malady continued unabated, as he went from bad to worse. Having reached the second stage of the disease, he was finally committed to the hospital for treatment. Though he showed some disposition at first to resent interference with his personal liberty, he soon became reconciled, and, in conformity to his delusions, regarded himself as the mainstay of the institution, constantly asserting to his friends that it was an ideally managed restraint, for which he frequently assumed the principal credit. In his perverted state, he asserted that he had driven teams hitched to circus wagons that the regular driver was unable to handle, and that it was marvelous to the onlookers how easily he manipulated the lines; and, with a bragadocia that was striking in its intensity, he averred that one of the owners had offered him a fabulous price to take a permanent situation with the circus. In his mind, he lavishly issued checks for fabulous sums, and in the most loquacious manner asseverated that he had $2,000,000.00 in silver deposited in a local bank. He was very talkative and gleeful, and was quite industrious in writing letters which were not very connected, and in which the chirography showed a pronounced tremor. At times he was refractory and very troublesome. In due course, however, the third period supervened and he clearly showed that he was gradually approaching the final end, which occurred about three years after the beginning of the attack. During much of the time of his condition he exhibited the most exalted and pronounced ideas of wealth, which is one of the strong symptoms of paresis.

In this disease the evidences of tremor are very pronounced. One of the first indications is a change in the handwriting which shows a loss of control of the finer senses of co-ordination of muscular movements. Also tremor of the tongue and lips in speaking, slowness of speech and hesitancy, which are among the early motor features of the disease, are frequently pronounced. In a large proportion of paretics there is some disturbance of the knee jerks, as there is more frequently an exaggeration than a diminution in the normad jerk; however, this is more pronounced in the first stage than in the more advanced stage, and even more than in the third stage.

I could easily cite a number of other well defined cases of this disease which have come under my personal supervision, but believing that no paper should be burdened with superfluity, I modestly refrain, my sole object being to give enough and no more.

Bladder and rectal difficulties are not uncommon in the earlier stages, but they

are nearly always present in the last stage of the disease, and retention of urine is usually an indication of paralysis of the muscular coat of the bladder.

In true maniacs and melancholia, the affections are usually incident to early life, while paresis is a type that manifests itself more pronouncedly in middle life.

As to the treatment of this disease, there is but one stage in which therapeutics are likely to have any curative effect; and no doubt you have already anticipated me in recognizing that to be in the stage of incipiency. If the etiology is clear and a history of syphilitic taint is predominant, mercurial medication seems to offer the greatest prospect of benefit. Though I have had no experience in its use, I should think from what I have read upon the subject that salvarsan would be specially indicated in the disease, if the causation is attributable to syphilization.

In conjunction with this line of treatment hydrotherapeutics may be used with benefit.

The general health of the patient should be carefully watched and the food should be plentiful and easy of digestion, such as milk, eggs, albuminous foods, vegetables, particularly asparagus, celery, fresh spinach, and fruits should be freely encouraged. Even between meals eggs and milk, served in the form of custards, may be allowed, but alcohol in any form should be interdicted.

In closing this very hastily and I can but feel imperfectly prepared paper, I am sure that to give you a summarized statement of the most important points in connection with it, as laid down by Berkley, I will have at least brought to your attention most valuable information, namely:

1. "General paralysis is a disease having the cardinal symptoms of progressive mental enfeeblement, accompanied by certain occult motor and spinal symptoms of a paralytic type, beginning in the best years of a man's life, and leading to absolute physical and psychical annihilation.

2. "A general alteration in the character of an individual in middle life should suggest the possibility af an oncoming progressive paralysis.

3. "Gradually increasing defects of intelligence arising at a similar period of life should be equally regarded with suspicion.

4. "Hypochondriacal and melancholic conditions, such as are prominent in the neurasthenic, when combined with recently acquired defective intelligence, are ominous with regard to prognosis, since they are suggestive of something more than nerve weakness.

5. "Patients showing mental disturbances accompanied with ideas of an expansive nature and progressive mental weakening, is sufficient ground upon which to base a diagnosis of progressive paralysis.

6. "Reflex pupillary immobility, when combined with ideas of an expansive nature and progressive mental weakening, is sufficient ground upon which to base a diagnosis of progressive paralysis.

7. "Changes of accommodation in the pupils should be carefully differentiated from those connected with the reaction to light.

8. "Slight inequality of the pupils, and slight changes in the innervation of the facialis, when not accompanied by other symptoms, cannot be considered to be of importance.

9. "The absence of ocular and spinal symptoms is not a positive indication, when there is mental disturbance, that the affection will not eventually become progressive paralysis.

10. "Loss of the knee phenomena occurs in depressive forms of insanity, notably in the confusional manias and melancholias, but is usually of short duration.

11. "The expansive delusions of the paretic are manifold and change from day to day.

12. "Maniacal outbreaks, occurring about the time of early middle life, except when recurrent, are always indicative of progressive paralysis.

13. "A progressive dementia not of traumatic origin, and not arising after a febrile disease, occurring between the ages of thirty-five and fifty-five, even though unaccompanied by delusions of grandeur, is always of a paretic nature."

As to the general pathology of this direful malady, I deem it unnecessary to further encroach upon your time and patience, for the text books offer all kinds of theories on the subject, from which, if you so desire, can be found ample pabulum to gratify the keenest appetite.

If what I have said in this illy prepared paper shall interest you sufficiently to pursue the subject to an extent that will redound to the relief and general welfare of this unfortunate class of our fellow beings, I shall feel amply compensated for my feeble efforts.

"These indecisions bring their own delays,
And days are lost lamenting over days,
Are you in earnest, seize this very minute—
What you can do, or dream you can, begin it.
Only engage and then the mind grows heated,
Begin, and then the work will be completed." —*Goethe.*

VENEREAL PROPHYLAXIS

P. S. Keim, M.D., Elk Garden, W. Va.

(Read at Meeting of Grant-H.-H.-Mineral Med. Soc., Jan. 1913).

The State and County Medical Societies are prone to taboo this very important subject, and I want most emphatically to state that this attitude is a grave error. We, as a profession, can no longer treat this world-wide important subject with the silent contempt that we have been bestowing upon it. The long non-suspecting, but now greatly aroused public is up in arms demanding from us, the guardians of the nation's health, protection from this gigantic monster that is sapping the very essence of life from the nation. Shall we stop our ears to the appeals of the nation for help, or will we set about in a scientific and business-like manner to meet these appeals with the dignity and effect that they justly merit? From the fifteenth to the eighteenth century the three venereal diseases were regarded as different manifestations of the same disease. In 1837-8 Ricord proved the fallacy of this belief by 667 inoculation experiments which stamped syphilis and gonorrhea as separate diseases for all time to come. About twenty years later Bassereau established the identity of soft chancre as a distinct infection. From this time on the study of these diseases progressed more or less rapidly, and their etiology and pathology were established on a firm foundation. The venereal are the most prevalent of all diseases, and gonorrhea is about eighty times more prevalent and one hundred times more disastrous, in its far-reaching effects, than syphilis.

In view of these facts, is there any good reason why we should not take up, in a systematic manner, venereal prophylaxis? Promiscuous sexual intercouse is by far the greatest factor in the spread of these diseases and their prevention will be successful in proportion to the diminution of promiscuity.

Here we must bring in the subject of prostitution, as we can not deal with venereal prophylaxis without dealing with prostitution at the same time, as they are so intimately connected. Also, must the "booze business" come in for its share of contumely, as it is directly or indirectly at the bottom of prostitution and consequently the disseminator of venereal disease. Every nation, country, and single city has just such an amount of prostitution as it deserves. Prostitutes could not exist if there was no demand for them, and no matter what any one says or does, they are here right with us, and undobutedly are going to remain until the final curtain of time is rung down on the last act in the history of nations. The causes of prostitution are many and varied. Suffice it to say that alcohol, ignorance, heredity (about 90%), association, and the desire for finery are among the principal causes. Added to the above we have the demand created by delayed marriages, due to the ever increasing high cost of living, and the fear of large families which is directly due to that most abominable of all national statutes which makes it a penalty of five thousand dollars fine and five years at hard labor for the giving of information as to how to prevent conception. With abortion, or the abortionist, I have no sympathy whatever; but I do contend that the American citizen should be taught the best and safest methods of preventing conception, so that he could marry early and feel confident that he need not have children until such a time as he is financially able to bring them up and educate them in such a manner as to insure the highest type of citizenship. I maintain that it is far better to raise two or three children that make noble citizens, than it is to propagate a whole yard full to grow up without attention and help make up the sum total of those who fill our jails, asylums and brothels. Thousands of children in this country are not so much born into life as damned into it. Damned into it is the only expression, no matter what the over-dined, over-wined and over-dressed ones may say about every one having a chance in our democratic country. Those whose children have every comfort and many luxuries care not how the less fortunate ones fare. I wish to remark, *en passant*, that continence on the part of the male, to the age of twenty-five or thirty years, is incompatible with perfect physical and mental health, the statements of the

sexually exhausted candidates for Oslerism to the contrary, nothwithstanding. When a vigorous young man is confronted with erections or emissions (nocturnal or diurnal), he naturally seeks relief in coition or masturbation. Right or wrong he does this very thing, and we must face facts as we find them, and from a study of these facts we may arrive at conclusions that will help us to a solution of the difficulty. Prostitution has been with us for ages and will continue to exist, as a necessary evil, as long as there is a demand to supply. In view of these incontrovertible facts we should consider a plan to segregate the prostitutes, put them under registration and supervision by the boards of health, provide efficient medical examiners and ample hospital accommodations for them, when sick, and thus largely prevent venereal infection. As soon as syphilis, gonorrhea, or soft sore is detected in a prostitute, she should be sent to the hospital and there detained and treated till all danger of infection is past, instead of being allowed to continue at her trade and spread infection broadcast. Only 20% of venereal infection is traceable to houses of prostitution, while clandestine prostitutes, street walkers, and near prostitutes are responsible for the other 80%. All registered women should be allowed the privilege of the town (with probably some restriction as to time, etc.), so long as they conduct themselves properly. Street walkers and soliciting on the street should not be tolerated, and offenders should be heavily fined and jailed. This is the class that, through lack of proper facilities for cleanliness, hygienic and preventive measures, spread so high a per cent of infection. No boys under a certain age should be allowed in the "Red Light District," and all who go there should be protected against financial loss and bodily injury. We afford this protection to those who visit saloons; so why not to the patrons of Venus? Police control has always proved a farce, as graft and other abominations are too liable to creep in and discrimination and oppression cause a miscarriage of justice. You may accuse me of wanting to legalize the infamous business of prostitution for which some can find no excuse. We, however, give legal sanction to the damning, hell-filling liquor traffic which is at the bottom of prostitution, and for which there is not the least semblance of an excuse in existence. Compulsory reporting of venereals would be made feasible only by the passage and enforcement of stringent laws prohibiting all others than legally registered physicians from prescribing for these cases. Another step in the line of prevention would be, to make the communication of the venereals a punishable offense and legal cause for damages. All syphilitics, at least, should be prohibited from serving the public in restaurants, saloons, hotels, barber shops, working in cigar factories, selling or handling food stuffs, etc. Educate the boys and girls (and men and women) in the proper hygienic care of the sexual organs, and their functions. Teach them how to reduce dangers of infection to a minimum by the liberal use of hot water and soap, the injection of the organic silver salts, and the application of 33% calomel ointment. Also teach them that the best and only absolutely sure preventive is to avoid exposure. Teach them to avoid alcohol, bad company, impure thoughts and obscene literature. Let our motto be—Educate the Public—yet let us not make the great mistake of expecting the educated public to avoid exposure to the venereal. Do we not every day see doctors educated in therapeutics, who are yet drunkards, morphine habitues and cocaine fiends (and an occasional one with the gonorrhea)? Yes, educate the public, but at the same time segregate and control prostitution in a manner that will insure the greatest amount of protection to the young and innocent, and at the same time lessen the dangers for the hardened sinner.

Do we not constantly preach peace and at the same time keep on building enormous battleships and guns? The gonococcus and treponema pallida are no respecters of persons, or anything else—not even the marriage certificate. The sanctity of the home is frequently invaded by an infection supposed to have been cured before marriage, or the result of an extra-nuptial seance after marriage, and then untold misery follows in its wake.

Another great stride in venereal prophylaxis would be the early diagnosis, rational

and vigorous treatment, and prompt cure of cases applying for treatment. About 90% of the chronic cases of gonorrhea, commonly called gleet, could have been cured if properly treated from the start. No physician has a moral right to treat clap or lues without first making a careful and thorough examination to determine the extent of invasion, complications, if any, and severity of attack. For acute gonorrhea the examination should consist of inspection and palpation of the organ, and, at least the two or three glass tests and microscropic examinations for the diplococcus of Neisser.

For chronic gonorrhea, in addition to the above, the urethra should be explored with bougies and sounds to determine the presence or absence of stricture; with the urethroscope to determine the presence or absence of infected glands and follicles. The prostate and vesicles should be palpated per rectum to determine their condition.

Treatment should be mild but thorough. Never put medicine into the urethra that could not, with safety, be put into the eye. Start treatment with balsamics or potass. acetate, or both. Later copaiva may be used to advantage in some cases. However, few cases need so stimulating a treatment. Injections of protargol or argyrol, and irrigations of silver nitrate, should be resorted to when swelling and redness of meatus disappear, not before. Gleet should be treated by dilatation with one of the standard dilators or sounds, instillations of silver nitrate, vaccines and prostatic massage. Irrigations should be used if indicated. Internal medication is seldom attended with brilliant results. A cure has been completed when no gonococci can be found after repeated examinations, when the urine is clear, sparkling, free from shreds, and the discharge is not reestablished by vigorous prostatic massage and an irritating injection.

I do not consider the Wasserman absolutely essential to the diagnosis of lues. In fact the diagnosis should be made by finding the treponema pallida, and treatment by salvarsan or neosalvarsan instituted, thereby preventing the Wasserman from becoming positive. Intramuscular injections of one of the insoluble salts of mercury should invariably be given in conjunction with salvarsan or neosalvarsan, and the Wasserman taken at intervals to see whether or not the reaction remains negative. The theory, substantiated by clinical experience, that some spirochetes are destroyed more promptly by mercury than salvarsan, and vice versa, should not be lost sight of. The iodides should not be overlooked in indicated conditions.

This short paper will not admit of a discussion as to when a cure of lues is completed. Suffice it to say that marriage should be prohibited for five years after infection. The last two years of this period must be free of all symptoms.

Chancroid is an acute ulcerative process developing within a few days after exposure. The lesions are usually multiple, with irregular edges and a sloughy base. They are tender to the touch and the base is not indurated. A suppurative inguinal adenitis frequently develops. The treatment consists of cauterizing with ten to one hundred per cent silver nitrate, and subsequent dressings of lotio nigra or aristol. Accompanying buboes are evacuated and treated antiseptically.

(NOTE.—We desire to protest against the statement of the essayist, that "continence on the part of the male to the age of twenty-five or thirty years is incompatible with perfect physical and mental health." The International Congress for the study and prevention of venereal diseases held in Brussels in 1902 unanimously resolved, that "sexual continence is not injurious to health." The American Society of Sanitary and Moral Prophylaxis also unanimously resolved, that "continence is compatible with health, and we reprobate the contrary as a menace to the physical and moral welfare of the individual and of society." We quote Sir Wm. Gowers, England's most distinguished neurologist, as follows: "With all the force that any knowledge I have can give, and with any authority I may have, I assert, as the result of long observation and consideration of facts of every kind, that no man was ever yet in the slightest degree the better for incontinence, and I am sure further, that no man was anything *but* the better for perfect continence." Fournier, the eminent French syphilographer, says: "Referring to the so-called dangers of continence, I do not know them, and have never observed them." And our own eminent specialist in venereal diseases, Dr. Prince A. Morrow of New York, says: "In my own experience I have never been consulted for the supposed harmful effects of continence in which the symptoms could not be traced to some other cause." We fear our essayist has been rather too close a student

of a little yellow-backed journal which is rather too much of a "critic" but not altogether a safe "guide."

With nearly all that Dr. Keim has written we heartily agree, and will be glad to help on his proposed crusade against the venereal diseases, as, indeed, we have been doing for several years. —EDITOR.)

PROPHYLACTIC VACCINE TREATMENT OF TYPHOID FEVER.

Charles L. Moore, M.D., Upper Tract, W. Va.

No doubt every member of the medical profession within the last year, has been swamped with literature from the various chemists who manufacture the antityphoid serum, or have been interviewed by their representatives, and for this reason I shall omit the early efforts of scientists of various nationalities, who believed in and were trying to produce the preventive bacterin for typhoid fever. Suffice it to say that for fifteen years or more these early products met with varying success; sometimes they gave brilliant results and again they were total failures, as evidenced by their use in the Boer war, by the German soldiers in West Africa, by the English in India, etc.

In this country the value of the treatment was so clearly proven, that in 1911 an order was issued by the Secretary of War making it compulsory for all officers and enlisted men in the army under 45 years of age to take the treatment, and the same thing occurred in the navy; and I read, only a few days ago, a report from the Secretary of War in regard to this matter, which stated that, in the ten months of last year ending November 1, 1912, of the fifty-odd thousand men in all branches of the army, there were only 12 cases of fever with 2 deaths; and the navy report is better yet—only a single case among the 62,000 men for 11 months of 1912. So it is plainly seen that there must be some good in the treatment.

With these few remarks I shall get down to what I do know, have seen, and what has occurred in my own practice.

Sixteen months ago, when I located in this little town, I found an epidemic of typhoid fever prevalent and in a short while I had 24 cases on my hands. Besides these there were cases attended by other physicians; in all, about 50 cases for the season and I found out that it appeared year after year.

The following spring (1912) I began to receive literature from the different chemists in regard to the preventive (vaccine) treatment for typhoid, which interested me deeply; so I read everything I could get hold of on the subject and wrote to medical friends who had greater opportunities for testing the treatment than I had, and finally decided to try it on myself, and had no bad results whatsoever, except a sore arm for three days. Then I tried it on a very neurotic friend with no bad result at all. I then decided to give the treatment to all who wished to take it, and frankly told the people all I knew about it, what was expected from it, what it had done in the army and navy, and what it did do and did not do to me. I said that if the treatment really was what was claimed for it, and that if the reports of its use were true (and I had no reason to doubt them), then it was a Godsend to this community; and as there was not a single fatality on record from its use or even a permanent disability, I thought every man, woman and child, within certain ages, should take the treatment, as they had everything to gain and nothing to lose. As a result I gave 92 complete treatments during the past summer and fall, and in spite of the efforts of several brother practitioners to belittle the treatment.

One physician aired his opinion around the country that he did not believe in it any more than he did in the antidiphtheritic serum. Another said, "Wait until M. kills a few people, and he will not be so enthusiastic over that treatment," etc., etc., but I stuck to my guns and have no cause to regret it yet.

And now a few brief remarks and observations on the treatment. I have given it to all classes and conditions of men, women and children, with no bad results at all, except a sore arm and three patients were made sick after the second injection—headache, malaise, slight fever, etc., but it lasted only about 12 hours. I gave it to a baby of 10 months and a lady of 66 years, to pregnant women, nursing mothers, menstruating girls; men working

in the field, who returned to work at once; to a man under the influence of alcohol at each treatment, etc.; in fact, I gave it under all conditions I found unless the person was complaining, and had an elevation of temperature at the time. Although we had about 40 cases around here this season, only two of them had taken the treatment; a man and his wife who nursed him. In the case of the man, his fever disappeared entirely on the 12th day, and in four weeks he was doing light work.

In the case of the woman, all signs were bad from the start; temperature, 105.6°; lips and tongue dry and glazed; delusions (not delirium), especially at night; hemorrhage on the 12th day, and normal temperature on 21st day, with a very rapid convalescence, although at one time all forms of nourishment had been refused for five days.

Two points of interest in this case were, the bright appearance of the eyes at all times, and a pulse of not over 108 at the worst.

A family near here developed a case of fever; in a few days four more were stricken. The vaccine treatment was given to the rest, with perfect results, though the mother died. Another family developed a case of fever. The vaccine treatment was not given, and all (8) went down; the mother died.

The name "vaccine treatment" seems unfortunate, in one sense, as people are liable to consider it a vaccination like that for smallpox, and too many of them remember to their sorrow the sore arms they once had, but after the first injection is given little trouble is encountered in giving the other two.

In the 276 injections I gave I had no trouble or infection in a single one. I simply scrubbed the site of the injection (preferably the insertion of the left deltoid muscle) thoroughly with alcohol, wet my needle with same and gave the injection. After withdrawing the needle, I rubbed the site of injection with a piece of cotton wet with the alcohol, to scatter the lump formed and also to close antiseptically the tiny needle puncture.

Conclusions—Among these cases I noted:

1. The younger the patient the less liable to local and constitutional disturbances.

2. Two to 45 years are the average age limits.

3. Naturally, a very fleshy person will suffer more with a sore arm than a thin one.

4. Persons complaining of aches and pains, such as neuralgia, rheumatism, etc., at time of treatment will have (or seem to have) them augmented 1or a day or two.

5. Several cases which had been complaining of feeling weak and run down for a month or more were decidedly improved after the first injection and continued to improve.

6. Only three persons were made sick (after the second injection), which lasted only about 12 hours.

7. Several patients mentioned that they perspired profusely upon exertion for two days after injection.

8. Menstruation, pregnancy and lactation are not affected by the treatment.

9. Two per cent and three per cent of patients who have taken the treatment will, when infected or exposed, develop typhoid, which attack, though, is much reduced, as to duration and severity of symptoms.

10. Whereas this bacterin treatment is a great aid in preventing the spread of the disease and in ameliorating the symptoms of one already infected, yet the usual precautions, such as cleanliness, disinfection, etc., should be rigidly carried out.

11. The typhoid vaccine (ampoule) treatment is very satisfactory if strict asepsis is observed.

HEREDITARY ALCOHOLISM IS AN UNDENIABLE FACT.

J. W. Williams, M.D., Richmond, Va.

"Alcoholism strikes a man not only in his own person, but in his *descendants*."—DR. LUNIOR, Paris.

Prof. C. K. Stockard of Cornell University has very recently (Oct. 1912), treated guinea pigs with alcohol in order to test its influence upon their offspring. He caused them to inhale the fumes of the alcohol an hour daily for six days in the week. The treatment has now extended to over nineteen months, in some cases. The result is astonishing, and in its relation to the human experiment, must be reck-

oned with. He took forty-five guinea pigs, male and female, and mated them.

1st. *Paternal* test: Alcoholic males were mated to normal females. Twenty-four matings in this case were made. Fourteen of these gave no results, or early abortions. Five still-born litters resulted, and five litters containing 12 young. Seven of these 12 died soon after birth. Four of the remaining five were from one litter, and the fifth is the only surviving one. It is evident, then, that the feeble vitality and death rate were due to the influence of the alcohol upon the spermatozoa or germ *cells* of the alcoholized male.

2nd. *Maternal* tests: Normal males were mated to alcoholic females. Four such matings were made. One gave no offspring. Three living litters were born—one having three living young that died at birth, and the other two litters only had two young each that survived.

3rd. Alcoholic males were mated with alcoholic females. This is the severest test. 14 such matings gave no offspring, or early abortions. Three still-born litters were produced, consisting of six young and only one living. This single one of the 14 mating died in convulsions on the sixth day after birth.

4th. *Nine* matings of non-alcoholic normal parents gave nine living litters with 17 large, vigorous animals and all living; while 42 matings of alcoholic guinea pigs had given only 18 young, born alive, and of these only seven (five of which were runts) survived only for a few weeks; while again, nine matings of non-alcoholic parents have given, as above, 17 young, all born alive and are healthy, robust guinea pigs.

In these painstaking experiments of Prof. Stockard, it is evident (a) that alcohol in experiment (1) influenced the germ cells of the alcoholic males. (b) that the alcohol had a double effect upon the alcoholic females. 1st—of influencing not only the cells (ova); but 2nd—also the foetus in utero. It is evident further that the defective offspring in all the cases was due to the influence of the alcohol upon the germ cells of one or both parents. Prof. Stockard says in closing: "These facts convincingly demonstrate the detrimental effect of alcohol on the parental germ cells and the developing offspring."

Now, the more complex the organism the more dangerous the effect of the alcohol upon it. If its effect on the lower vertebrata is such, it is correspondingly increased as we ascend the scale up to man, the most complex of all the vertebrata. I cannot forbear, here, to refer to the recent researches (1909 A. D.) of Prof. Laitenon on very young offspring. Prof. Laitenon investigated the physical condition, during the first few months of life, of 20,000 children whose parents he divided into:

(1) Abstaining parents who since marriage had never taken alcohol.

(2) Moderate parents who took only a glass of beer a day.

(3) Drinkers who took more than a glass a day. The Prof. says: "Statistics concerning the number of living and dead children born, the weight at birth, the weekly growth for eight months afterwards, etc., showed that the children of abstainers possessed an advantage over those born of moderate drinkers; and that the children of the moderates had an advantage over the children of drinkers. Thus the date at which the teeth appeared was taken as one of the tests. The abstainers' children cut their first teeth at an average age of 4.1 months; the moderates' children at 4.9 months, and the drinkers' children later than six months! At the end of eight months 27.5% of the abstainers' children were toothless, 33.9% of moderates', and 49.3% of the drinkers'."

Dr. Sullivan "in the personal investigation carried out some years ago, ascertained that of 600 children born of 120 drunken mothers, 335 (over one-half) died in infancy or were still-born, and that several of the survivors were mentally defective, and as many as 4.1% were epileptic." "Alcohol, lead, and other protoplasmic poisons are all to be dreaded," says Sir Victor Horsly, "because of their power of undermining the vitality of the unborn child. Alcohol had been shown to pass in considerable quantities as such into the foetus."—Sir Victor Horsly, p. 250.

The first Eugenic Congress has just been held at the University of London, presided over by L. Darwin, son of the great evolutionist. "It was organized to spread a knowledge of the laws of heredity—the science which deals with all the influences

that impress the unborn qualities of a race with traits that are in the blood—the protoplasm." Four hundred delegates were present from all nationalities. As seed is more important than cultivation, so is the healthy hereditary germ cell of more importance to the race and to society than culture and refinement.

These facts cannot be ignored, but must be reckoned with by all thoughtful physicians.

It seems, then, the hereditary alcoholism is an undeniable fact, and that it strikes a man not only in his own person, but also in his *descendants.*

Box 15—Station B.

ACTINOMYCOSIS OF LOWER JAW.

REPORT OF TWO CASES.

Wm. Golden, M.D., Elkins, W. Va., Superintendent and Surgeon in Charge of the Davis Memorial Hospital.

Case I.—O. G., age 16; admitted to the Davis Memorial Hospital July 19, 1911; referred by Dr. Geo. F. Hull of Durbin. Patient was a helper about a lumber camp in Randolph county. Claimed to have enjoyed good health up to about three or four weeks before admission. The disease commenced with a swelling in the left faucial region, underneath and in front of the tonsil on that side. He consulted several physicians and was treated for quinsy. On admission the size of the swelling was considerable, and it certainly had all the appearance of a quinsy. A curetting through an incision at once revealed the nature of the disease. I curetted the mass out as thoroughly as I knew how, mopped the cavity out with iodin, and placed the patient on potassium iodid internally, along with general dietetic and hygienic attention. In about ten days the swelling reappeared in the same place but extending further into the pharynx, and a lump also appeared on the neck right under the jaw. Curettage was again resorted to, and as far as the outside mass was concerned, it was certainly done with perfect thoroughness. The iodid treatment was continued, adding gargling with a solution of potassium iodid. The granulomatous masses, however, continued to appear and reappear in different parts of the throat and upper neck on both sides. At one time the mass in the right pharynx grew so rapidly that a hasty curettement was necessary to relieve suffocation. The administration of potassium iodid was pushed until the patient was taking two drams of the saturated solution three times a day. When several weeks passed under this treatment without permanent good, Bevan's treatment of sulphate of copper was resorted to. Perceiving no benefit whatever from this, the use of iodid of potassium was resumed. The patient died, apparently from exhaustion, Oct. 25, 1911.

Case II.—W. R., age 42; admitted to the hospital March 8, 1911; referred by Dr. S. D. Few of Parsons. The patient was a common laborer employed in a tannery in Tucker county. The disease commenced with swelling of the left lower gum about three weeks before admission. On admission the swelling was about the size of a walnut, causing a perceptible lump on the outside of the jaw. A swelling of about the same size was present on the left side of the neck under the chin. A thorough curettement was done, the wounds mopped out with pure carbolic acid, and the outside one packed with iodin gauze. He was placed on increasing doses of iodid of potassium. He left the hospital March 15, 1912 and continued the treatment under the direction of Dr. Few for about two week. He then went to the Johns Hopkins Hospital where he died about a month later.

Comments—By reporting these two cases which occurred in my practice only a few months apart, I do not intend to convey the idea that the disease is common. On the contrary, inquiry among physicians in the State indicates that the disease is very rare. As the disease runs a very chronic course, it is unlikely that a case would be overlooked throughout its course, although it is quite probable that the disease is nearly always mistaken for something else at its beginning. Yet it is evident a disease that we must keep in mind in cases of swellings of an obscure character, especially about the throat and jaws.

The somewhat frequent occurrence of the disease in cattle naturally suggests the inquiry about the association of these two patients with domestic animals. The patient in case II, working about the tannery and handling hides, had ample opportunity for contact with the fungus of the disease. The patient in case I had no such opportunity as far as horses and cows were concerned, as there were none of them close to him.

Nothing that I did availed to do permanent good to either of these two patients, and the same evidently applied to whatever treatment was followed at the Johns Hopkins Hospital in case II. I am very much impressed, however, with the effect of potassium iodid in these cases. It seemed to me to have a very marked retarding effect upon the progress of the disease.

For some time after my experience with

these two cases the thought kept coming back to me again and again, that possibly my results would have been better had the local treatment been left out and the affected tissues left entirely undisturbed. It is possible that the following case proves this suposition to have a good basis.

Case III.—J. P., age 16, admitted to the hospital Dec. 21, 1912, under the care of Dr. L. W. Talbott of Elkins, at whose request I was associated with him in the treatment of the case. About two or three weeks before admission the patient had a very small pustule on his chin to which he applied a piece of shoemaker's wax. Soon after a gradual swelling of the jaw took place, and when I saw him it had the characteristics of actinomycosis. He was placed on increasing doses of potassium iodid without any other treatment. The swelling in a few days began to decrease and continued to do so steadily. When discharged on January the 24th, the swelling was almost entirely gone.

In this case nothing whatever was done locally, not even an incision or puncture for diagnostic purposes; and consequently therein lies a serious objection to any definite conclusion. For this reason I have not included this case in the title of this report. Nevertheless, should I ever come across another case of suspected actinomycosis, I would feel justified in placing it on rapidly increasing doses of potassium iodid and note the effect before proceeding with surgical interference.

Perhaps the most instructive lesson that I have learned from these cases is, that actinomycosis is a very serious disease, frequently proving fatal, text-books to the contrary notwithstanding.

SHOCK AND ITS MANAGEMENT.

Irwin Hardy, M.D., Morgantown, W. Va.

Mr. President, and Gentlemen of the Monongalia Medical Society:

You have asked me for a paper on shock. I prefer to give you a few lines from my own experience, and my own opinions, rather than quote text books and statistics. You may have these ideas for what they are worth.

The term shock, as used in surgical parlance, brings to our mind a picture not readily forgotten. *Etiology*—Injury to the tissues, and also the thought of injury. In many cases the mental factor has been proven beyond the question, as for instance, the high mortality in those cases of frog accidents on the railroad, frequently the patient has lost only a foot, yet he succumbs to shock. I would say that the cause of shock is a succession of painful impressions, made upon the receptive centers in the brain, and reaching these centers by means of the sensory nervous system, and by means of the special senses. There are very many contributing causes: too much handling of viscera, a cold operating room, prolonged operations, too much, or too long-continued anesthetic, operations done when patient is not wholly under the anesthetic, and a great many others which could be named.

The symptoms of this condition are well known to all of you, and depend upon the degree of shock. I have had patients who would talk and laugh with me, and would be dead in two hours. The usual symptoms are small thready pulse, which is easily compressible, cold clammy skin, sighing respiration, not on the order of the Cheyne-Stokes respiration, but well described as sighing. Patient may have an absolutely clear mental condition, or may be unconscious. Skin is pale and expression anxious. Pulse is accelerated, perhaps as much as 120 or 130 or more.

Pathology obscure. There is a loss of equilibrium on the part of the vaso-motor center in the brain, and the bulk of the blood is collected in the large vessels and in the viscera. It would appear to be a vaso-constrictor effect upon the superficial vessels, and a vaso-dilatation upon the internal vessels. The subnormal temperature is most likely due to the depressed condition of the heat center.

Diagnosis—The history of the case and symptoms as outlined make the diagnosis comparatively easy. Though it is by no means easy in cases which have lost much blood, to say just how much credit to give to true shock, and how much to a condition of syncope. In an article on shock, in the *Jour. Am. Med. Ass'n* in January of last year, I called attention to a case in which a man was admitted to the hospital in an unconscious condition, his leg being badly crushed; and I amputated the leg without any anesthetic, and the operative procedure did not add to his shock, because his condition was due more to syncope than to shock.

Prognosis—Mild degrees of shock are not generally serious. Severe shock is always

a grave condition and very many will die under any known treatment.

Treatment—In elective operations, prophylactic treatment is a most important factor. I have seen several deaths caused by the administration of alcohol by sympathetic friends. In many of these cases where the patient has to be transported a great distance to the hospital, he suffers a great deal from loss of body heat, the alcohol assisting very greatly in this loss.

I do not say that very small doses of alcohol hypodermically may not do some good. I do not know. Heat applied by means of warm blankets, hot water bottles, etc., does good. Strychnin I mention only to condemn. Salt solution containing adrenalin does good in cases that have lost considerable blood. In pure shock the saline solution has not been of any value to me. In operative cases, I have made it a rule for several years to give a preliminary hypodermic one-half hour before operation, of morphia, strychnin and atropin. I rarely see shock following such operations. The morphin gets to the brain and renders it less susceptible to the cry of the nerves. Crile advises cocainizing the sensory nerves in accident cases, amputations, etc., so that they may not carry the painful messages. Of Crile's pneumatic suit I have no knowledge. Rectal injections of strong coffee do good. Nitro-glycerin I believe does harm. There is no condition, to my knowledge, in which one feels his inefficiency quite so much as in a severe case of shock. Text books outline treatment with great exactitude and nicety, but, gentlemen, when you go to carry out the instructions you will be very often disappointed. In accident cases, whether to operate during shock or not, has been a much mooted question. I have tried both plans and am in favor of waiting for shock to subside, provided it begins to show indications of so doing within a reasonable length of time.

The old treatment of fracture of the neck of the femur by Buck's extension is as bad as it is archaic. In all but very old and very feeble subjects reduction and fixation in plaster by Whitman's method is the treatment of choice.—*American Journal of Surgery.*

Abstracts

PROGNOSIS OF TUBERCULOSIS

John J. Lloyd, Jr., M. D., Catawba Sanitarium, Va., in Va. Med. Semi-Mon.

Patient always wants to know when he will get well. A cure in the sense of elimination of all tubercular bacilli is infrequent, yet recoveries are frequent and there are few cases so advanced as to be regarded as hopeless.

Prognosis is bad in early infancy and extreme age. From 8 to 15, good, for children of this age are usually amenable to discipline. From 15 to 22, they are apt to be unmanageable. Outlook for women is probably better than for men. Treatment is not so radical a change for women and they are more apt to co-operate in "taking the cure." Men, being the breadwinners, are apt to worry.

More fatal in the negro and Irish, and the Jew is relatively immune.

A bad family history makes prognosis grave, because it shows an inherited lack of resistance. Persons who have had outdoor occupations not so good, as the change is not great enough.

A nervous, high-strung temperament and disposition make a patient hard to deal with. However, if this is due to toxemia, which may be cured by outdoor life, the subjects make favorable cases. An intelligent and forceful character will help much. The rich naturally stand a better show than the poor, for the treatment means abstinence from productive labor for a time, at least. The State may step in here and help out.

Ignorant and foolish relatives are an obstacle, especially where women are concerned.

A change of surroundings and often a change of climate produces in many cases wonderful results. This is one reason for sanatoria, but their chief value is educational. They must learn now to protect themselves from their own sputum, &c. Physicians should not tell patients they can be cured in a short time.

No disease requires more tact, patience and common sense on the part of the physi-

cian. He should patiently discuss with patient all the little details of symptoms and give explicit directions to cover emergencies in the future. Hopefulness and cheerfulness on the part of physician add much.

The character and severity of symptoms the chief point. Pulse out of proportion to temperature and which does not respond to rest, is bad. Cough has comparatively slight significance. Power of food assimilation is of utmost significance. Pleurisy unless purulent and with adhesions is of slight significance. Nephritis, arteriosclerosis and congestive conditions of the liver are of utmost gravity. Tuberculosis of larynx though serious is not hopeless if diagnosed early and properly treated. Pneumonia and grip are the most serious intercurrent acute diseases C. D. L.

Selections

THE FRIEDMAN CONTROVERSY

There has been considerable discussion recently in the lay press and to a certain extent in current medical literature, about the new vaccine cure for tuberculosis originated by Dr. Friedmann of Berlin. Judging from the comments of those who are properly qualified to express an opinion regarding the intrinsic merits of the treatment, it must be concluded that the burden of proof still rests with Dr. Friedmann. As it often happens in matters of this kind an individual may, in the excitement of the moment, make statements and claims which are difficult to substantiate as time goes on. This has been the course of events in only too many therapeutic measures which have at first been heralded with great acclaim. No person, realizing the possibilities of modern science, would be so bold as to state that a cure for tuberculosis cannot be found; but knowing what we do of this disease and the history of its therapy it is only reasonable that we should maintain an attitude of more or less skepticism toward any remedy which has not undergone a thorough and prolonged trial. In tuberculosis the element of time is a highly important factor in determining the efficacy of treatment, as many cases improve temporarily only to suffer a recurrence at a later date.

Undoubtedly Friedmann's work awaits confirmation or refutation by other investigators and it is fortunate that he is in a country whose medical men are quite competent to analyze his data, repeat his experiments and pass judgment thereon.

Friedmann's original article appeared in the *Berliner Klinische Wochenschrift* of November 18, 1912, and apparently was in the nature of a preliminary report.—*The Post-Graduate.*

The following will be of interest in this connection:

"Like most investigators who have sought vaccines for bacterial infections, Friedmann came to the conviction that the most potent curative and immunizing powers lie in the living bacterial organism itself, and not in the dead organism as used in the method of Wright and his school. Furthermore it is obvious that such a living vaccine must be avirulent. After many years of observation and experiment, Friedmann finally obtained a stock of tubercle bacilli, which, by repeated culture and passage through animals, became entirely avirulent for the human organism. Under pressure, Friedmann admitted in the discussion that his bacillus was derived from one of the cold-blooded animals, the turtle.

After demonstrating by injections into animals and even into himself that living vaccines derived from this bacillus were entirely harmless, he began to inject these vaccines into patients afflicted with various forms of tuberculosis. After trying various ways of injection, Friedmann finally concluded that the best results were obtained by what he calls: 'Simultaneous injection'—*i.e.*, one dose injected directly into the veins at the elbow, the other intramuscularly. The intravenous injection is not followed by any local manifestation, but the intramuscular injection, *in favorable cases*, is followed by a local induration which slowly disappears. These injections are repeated at intervals of a few weeks, as many as half a dozen being sometimes administered. In advanced cases of tuberculosis, the induration disappears rapidly. Such a rapid disappearance is regarded by Friedmann as an unfavorable omen.

The remedy has now been used by Friedmann and his workers the past year or two in 1,182 cases of pulmonary and

surgical tuberculosis. Friedmann offers no statistics, he merely states that after one, two or more injections, all cases of tuberculosis except those far advanced are completely cured. As proof of his claims, he merely contented himself by presenting in the course of his address a number of cured cases, the recital of which is highly impressive. For instance, he reports a case of knee tuberculosis in the advanced stage, with fungous granulations and six deep fistulae, completely healed after two injections. He showed cases of laryngeal tuberculosis completely healed after three injections. He demonstrated various other cases of tuberculosis of the lungs, genito-urinary tract, lymphatic system, eye, skin, etc.; many cured; all favorably influenced.

It is only a short step from cure to immunization, and Friedmann has already started on this problem on an extensive scale. He has thus far vaccinated 335 children, ranging from the newly born to the age of three years. Most of these children had tuberculous surroundings, and although some of the children were injected over a year ago, in not one has tuberculosis developed. Manifestly, no definite conclusion can be drawn from this as to the immunizing power of Friedmann's remedy. One thing was surely demonstrated by these observations, both of Friedmann and his co-workers, namely, that the injection of the avirulent living bacilli was entirely harmless.

Friedmann's address is naturally tinged by copious optimism and enthusiasm and affords very little opportunity for a well balanced judgment of his work. That is why we followed the discussion of his paper with perhaps greater interest than his original thesis. The expressions of those who took part in the discussion may be grouped in four classes: first, the enthusiastic; second, praising with reservations; third, mildly critical; fourth, expectantly conservative. It is interesting to note that, with one or two exceptions, those who praised the remedy were those who had actually used it. No one deliberately said that the remedy was of no avail. The largest part of the criticism came from the laboratory workers, such as Citron. These directed their main attacks upon what to us seems the weakest part of the exposition, the admission by Friedmann that animals immunized by his vaccine did not recover, as was to be expected, although they lived more than twice as long as those that were not immunized. Others criticized Friedmann, some rather bitterly, because he refused to divulge the details of his remedy and his methods. To our mind Friedmann was fully justified in his course. Had he reserved the remedy to his own use the case would be different. He freely gave the remedy, however, to a large number of clinicians in Berlin. We need only think of the possibilities of injudicious preparation and administration by both well-meaning and unprincipled persons to appreciate that Friedmann is perfectly right in keeping the secret to himself until his method is placed on a surer footing. Ehrlich keeps the preparation of Salvarsan a secret, but we have heard of no criticism of his action. At all events, Friedmann promises a detailed publication in the near future."—*American Jour. of Surgery*, Feb., 1913.

(The above remarks, printed at the request of President Hupp, contain some of the facts presented in our editorial of last month. We have no sympathy with the too conservative manner with which Friedmann has been treated by a part of the medical profession since his arrival in this country. They seemed to look on him as a fakir, attempting to advance his own interests at the expense of the public, instead of a man of science honestly engaged in an attempt to solve a great medical problem, success in which would bring to the world a mighty blessing. His report of cures presented to the Berlin Medical Society was certainly sufficiently encouraging at least to justify the profession of this country in extending to him a cordial welcome and an opportunity to prove his claims. Time will show his remedy to be either a valuable one or worthless. If the former, the gain will be the world's chiefly. If the latter, the loss will be Friedmann's, in reputation and money. We lose nothing. But by attempting to shut out a possible good remedy we do lose much. We lose the esteem of the people who do not fail to note what seems to them the narrowness and bigotry, if not jealousy of the medical profession. This is deplorable at a time when we are just beginning to convince the public of our genuine altruism, our desire and efforts to advance the interests of the people by giving to them information on all topics that may in any way help in the preservation of health. We are glad that an opportunity is afforded, however grudgingly, for a demonstration of the benefits of the alleged tuberculosis cure. It would seem to be our duty to welcome any man from any country who comes to us with a remedy that holds out to the diseased and suffering as much hope, even, as this of Friedmann appears to do.—Editor.)

The West Virginia Medical Journal

S. L. JEPSON, A.M., Sc.D., M.D., *Editor.*

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WHEELING W. VA., APRIL, 1913

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

CONTRIBUTIONS TYPEWRITTEN.

It will be satisfactory to all concerned if authors will have their contributions typewritten before submitting them for publication. The expense is small to the author—the satisfaction is great to the editor and printer.

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Editorial

PAY UP.

"One good resolution for you
Is to pay up your bills when they're due;
To hand out the tin
With a soul-warming grin,
And say something nice when you're through.
—*Walt Mason.*

This is Walt's philosophy, and it is O. K. The majority of our members agree with Uncle Walt, and have already paid their dues. Besides that, we have already 74 who are new to us. That is going some—the best, we think, of any year of our existence. If you can now hold the old members, getting in their dues at once, we will shoot over the 900 mark this year. Try it, Mr. Secretary. Read "The Value and Importance of Membership" on another page, and hand it to some in your neighborhood whose membership is desirable.

MALPRACTICE SUITS.

Thoughts of malpractice should ever be in the mind of the physician, whether or not he engages in major surgery. Suits have been entered against physicians because of fatal hemorrhage from the umbilical cord. The only case in which the writer was ever threatened with a suit was a simple fracture of the radius in a charity case, where the result as to union and position was perfect, but on account of the violence of the injury to the hand adhesive inflammation of the tendons resulted, causing temporary disability. No practitioner is safe from these annoying cases. A shyster attorney and a small-fry, dishonest doctor make a combination against which honest, skillful, charitable physicians are only too often compelled to contend. It is fortunately true that the physician generally wins his case, but at the cost of much money, more humiliation, and almost necessarily loss of prestige and consequently of practice. In view of this fact, there is too often a disposition on the part of the doctor to quietly compromise his suit, rather than openly defend it in court.

Recently in Baltimore a suit was won against Dr. Hunner, a professor in a medical school and attached to several hospitals. The case, as we gather from a paper kindly sent us by Dr. Golden, was after a surgical operation done as "a labor of love by Dr. Hunner. He presented no bill for his services and received no remuneration for them." It seems that a very small piece of gauze—not larger than a lady's thimble—was left in a wound after an operation on a woman for a "calculous kidney that had long been tuberculous." It was charged that this delayed the recovery and caused tuberculosis of the lungs. It was shown that the operator was in no way responsible for the drain being overlooked, which was the fault of the hospital interne. Of course the tuberculosis of the lung had existed before the operation. But the jury decided the doctor must pay pay $1,000 for his charitable work. The *Baltimore Sun* takes a surprisingly sensible view of the case. We quote:

"In the old days when the family physician was also surgeon ;when he, personally, diagnosed, operated and watched over the convalescing patient, it was doubtless the proper thing to hold him responsible for the whole job. In this day, however, when most operations are performed in well-appointed hospitals with competent attendants, when nearly all surgeons

are specialists, and the whole tendency of the day is toward specialism ;when, undoubtedly, the famous specialist can frequently do more good by performing an operation and leaving to others the work of caring for the patient thereafter, it would seem that any existing law holding him responsible for the whole treatment might be amended to advantage.

One thing is sure—if a surgeon feels that he is subject to damages for the carelessness or incompetence of his assistants, he will be very careful about giving his services gratis in cases that might otherwise appeal to his sympathies. That and the fact that Dr. Hunner, personally, has been convicted of no carelessness in connection with this case, are the chief points that it seems desirable to emphasize."

Dr. Howard Kelly, in a newspaper communication, takes the same view of the case. He points out the weakness of juries who permit their sympathies to be aroused and their judgment obscured by a certain class of lawyers who play on their emotions, until

"justice miscarries, courts lose their dignity, and they no longer remain the interpreters of the divine will working its way out in human relationships. Ultimately, as in all acts of injustice, the real burden falls upon the public at large. Such a precedent as this may well cost many human lives through the unwillingness of our best surgeons to accept such cases in the future without guarantees of immunity from prosecution, which are impracticable."

This trial is of peculiar interest just now to every West Va. physician, by reason of the fact that two of our number have been recently sued for alleged malpractice. One case is ended, viz. that against Dr. O. H. Hoffman of Thomas. The Medical Defense Committee of the State Association, we are informed, gave their aid in the defense. A number of reliable physicians, members of the Association, were ready to give truthful testimony, and one physician of another type was present, as usual in these cases, but when the test came refused to testify, or for good reason was not wanted by the plaintiff. Those present from the State Ass'n ready to testify for the defense were Drs. McDonald of Fairmont, Rodgers and Owens of Elkins, C. A. Hoffman of Keyser, Butts of Davis, Huff and Few of Parsons, and possibly others. The case was heard on the 18th of March, and after all of the evidence for the plaintiff was heard, the Court, on motion of the defendant's counsel, directed the jury to bring in a verdict for the defendant, saying that the evidence adduced by the plaintiff was not sufficient to justify further hearing. The ending is a happy one, and we are justified in the opinion that but for the position taken by the Association's Committee on Defense, with the strong men furnished as witnesses, the case might have had a different ending. The defendant himself appreciates the aid rendered him by the commitee and his brother practitioners, and thus writes: "I must say that it makes me proud that I am a physician when there is such a rallying to one's support as was evident in this case."

The case ought to have two effects, 1—To impress the value of the defense plan of the State Association; 2—To induce every good physician to join his local society, and thus come into the State Ass'n where he can be taken care of when he gets into trouble. We might add a third point, viz. the importance of paying dues promptly. Have you paid yours? If not, you may some day find yourself the victim of a suit with dues unpaid. A case of this kind happened in Penna. several years ago, and the man sued looked out for his own defense. Hadn't you better pay up now?

S. L. J.

A SECTION ON EYE, EAR, NOSE AND THROAT.

At the Clarksburg meeting of the State Association there was organized a section with the above title. Dr. Louchery of Clarksburg was made chairman, and Dr. E. A. Hildreth 3d of Wheeling secretary. Since that time we have no printed evidence of the section's existence, although we are informed that it lived a year, and that Dr. Johnson of Fairmont was at a later meeting elected as chairman. Our energetic president, Dr. F. L. Hupp, ever alive to the interest of the Association, has recently corresponded with a number of specialists of the State, and has found a very general interest in a proposed revival of this new section. On March 22nd a number of these men met at the Ft. Henry Club at a dinner, as guests of our genial president, who is himself much interested in whatever will tend to build up the Association and add to the profit and interest of every

member attending its meetings. Letters from specialists over the State made it certain that a desire for the establishment of the new section was unanimous. The subject was fully discussed, all present fully concurring in the advisability of putting this proposed section on a firm footing. The feeling was, that one day, probably the last, should be given to papers from members of the Association devoting themselves to the class of diseases embraced under the above head. This not to interfere, however, with the other work of the Society, as a separate room will be occupied.

Dr. G. A. Aschman of Wheeling was chairman of the meeting, and Dr. H. R. Johnson of Fairmont secretary. An executive committee was appointed, consisting of Drs. V. T. Churchman of Charleston, T. W. Moore of Huntington, R. W. Miller of Martinsburg, G. A. Aschman of Wheeling, and H. R. Johnson of Fairmont, in whose hands is left preparation for the coming meeting of the Association at Charleston. Dr. Johnson, as pro tem. secretary, will communicate further with the specialists, and inform them as to the preparation of papers and general arrangements for the meeting now not far off. As a starter for the program the following papers were promised by those present:

A Report of 100 Cataract Operations, John L. Dickey, Wheeling.

Nasal Headaches, E. A. Hildreth 3rd.

Sinus Thrombosis, H. R. Johnson, Fairmont.

Surgery of the Mastoid, H. E. Oesterling, Wheeling.

Etiology of Milium, G. A. Aschman, Wheeling.

Present Status of Tonsil and Adenoid Surgery, Ivan Fawcett, Wheeling.

Complications of Acute Otitis Media, M. B. Kelly, Wheeling.

A good start is thus made, owing to the energy of President Hupp. Let the specialists take heart, and send their titles to Dr. Johnson at Fairmont, and he will do his share toward making the meeting of the new section a success. S. L. J.

THE SURGEON'S PERIL.

The death of Dr. Algernon T. Bristow on the evening of March 26, at his home in Brooklyn, has cast a gloom over the entire profession. Dr. Bristow sustained a slight wound of the finger twelve days before his death while operating on a case of septic appendicitis.

This talented editor, surgeon and teacher with a nation-wide reputation, belonged pre-eminently to Osler's class of professional gentlemen, who combine intellectpal superiority with nobility of character. Like many another surgeon whose body and mind have withered because of the venom sting of the streptococcus while serving humanity, this man leaves in a grateful memory an untarnished name, and a life of self-sacrifice, his *monumentum aere perenius*.

The *New York Times* comments editorially as follows:

> The death of Dr. A. T. Bristow from blood poisoning, developed from the prick of an instrument while operating, adds one more to the list of distinguished surgeons who have laid down their lives as an incident to their practice. *The Times* printed recently an anonymous letter from the chief surgeons of one of this citys' hospitals, describing the poison contaminating the surgeon's knife or scissors' blades and needles as being as "virulent, or nearly so, as rattlesnake venom." He added:
>
> "Any surgeons of wide experience will tell you that this is not overdrawn. And the risk of his own death from accidental wounding of the finger with such an instrument is at least as great as that of being seriously wounded or killed outright by a bullet, if fighting in the front ranks of one of the great battles between the North and South in our country's war."
>
> Surgery is indeed reckoned one of the shortest lived and most honored and glorious of profession. The wealthy who cavil at the fees of surgeons know little of their risk and devotion. And they are as ready to do service for the very poor, without compensation, as for the rich. In the death of Dr. Bristow this community has lost a man of splendid and inspiring personality, one who has upheld the best traditions of his profession. F. L. H.

We met a member recently who seemed to think that no one should prepare a paper for the coming meeting unless requested to do so by the secretary. This is a mistaken modesty. Any member should regard himself at liberty to present a paper at any meeting on any theme. Let not the members wait for an invitation. It may never come. The secretary does not know all the members, and he can not be expected to know who may have ideas or experience which he wants to present. The editor has

presented quite a number of papers in past years, and he has received very few invitations to do so. Get busy. The JOURNAL can take care of the papers, if the Association lacks time to hear all.

TO NEW MEMBERS.

As the names of new members reach us we are sending back numbers of the JOURNAL, one for each month of the year, as far as possible. Some of the issues for this year are exhausted, so that we are compellel to send issues of other years. All contain papers of interest.

Dr. Frank Martin of Chicago, editor of *"Surgery, Gynecology and Obstetrics,"* has commenced the publication of an *International Abstract of Surgery,* a comprehensive review and index of the surgical literature of the world. In this most invaluable work, the editors have the co-operation of the editors of three of the most important abstract journals of France and Germany, whereby there is to be an exchange of material collected in the different countries. The Abstract is to be supplementary to *"Surgery, Gynecology and Obstetrics."* It will embrace, as stated by the publishers,

1. A comprehensive index of surgery from all sources, arranged anatomically under departments, giving the author's name, subject of communication, and the name of the journal from which the article is abstracted.

2. An abstract of the surgical literature from all countries, prepared by the combined efforts of our French and German contemporaries and our own staff for Great Britain and America. This will appear under departments and will include abstracts and reviews of (a) original articles, (b) monographs, (c) books, and (d) clinics.

We wish for this new enterprise the abundant success it is bound to deserve.

We regret to note that Van Horn and Sawtell have recently had a disastrous fire in their New York establishment, entailing a loss of $25,000. However, this fire, which destroyed much of the lower story of their building, served to demonstrate the energy possessed by the company which did not permit this disaster to interrupt their business for a day.

Van Horn and Sawtell are to be congratulated on having an organization and system that when confronted by a disaster so completely suspending the activities of one of the most important departments can yet maintain the balance of so large a business at its full efficiency.

THE VALUE AND IMPORTANCE OF MEMBERSHIP IN THE STATE MEDICAL ASS'N.

WHY?

Not merely because of its scientific value;

Not merely because it promotes social and fraternal relations;

Not merely because of its strength as an organization for advancing and conserving the corporate interests of all its members.

BUT—

Because of its economic value to you.

Because of what you get.

Because you can't afford to remain without it.

CONSIDER THIS PROPOSITION.

Membership in the State Medical Association immediately confers upon you, *without extra cost,* the following:

1. *You receive* the W. Va. Medical Journal monthly. It keeps you in touch with the latest scientific thought and progress in all departments of medicine.

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4. *You are eligible* to membership in the American Medical Association, our great representative national society, the greatest in the world.

HOW?

Join your County Society at once.

Membership in your County Society confers upon you membership in the Medical Society of the State, and can be obtained by applying to the Secretary of your County Society.

(The above is copied from the N. Y. State Medical Journal and adapted to our use. Show it to your outside friends).

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.

In a recent issue of *The Journal,* the editor, Dr. Simmons, discusses a proposed change in the membership of the Association. He points out that in the county societies are 70,000 members, while the actual membership of the A. M. A. number but 36,822. The county society members choose delegates to the State Association, and the latter in turn elect delegates to the meetings of the A. M. A. The House of Delegates of the A. M. A., therefore, "is

created by and represents the combined membership of all the county societies of all the states. The present situation is shown in chart No. 1. * * Those whom

CHART NO. 1.

we now call members of the A. M. A. are really those members of the organization who contribute to the support of the Am. Med. Ass'n; while for actual membership of 70,000 there is no distinctive name.

It is proposed to designate the 70,000 as (chart 2) members of the Am. Med. Ass'n,

which they really are and always have been, while those included in the inner circle (that is, those members in good standing of their county and state societies, who also pay $5 a year to support the work of the American Medical Association) are to be called "fellows of the American Medical Association" instead of "members." This will make no change in the membership standing or relations of any man. In other words, those who are now known as "members" of the American Medical Association will be known as "fellows" of the American Medical Association, while the term "members" will be applied to the entire, combined membership of the component county societies of the whole country.

This plan has several advantages. In the first place it will give us a name for the entire membership of the organization, which we have never had before. Another advantage will be that it will make clear that the voting power lies with the 70,000 members and not with the 36,822 "fellows." When this plan was first proposed, some got the impression that the intention was to compel the 70,000 members of the county societies to become "supporting members" of the American Medical Association, as the term is now understood. This, of course, would be a ridiculous proposition. The proposed change contemplates leaving membership conditions exactly as they are; it contemplates changing the name, and not the relation.

One great advantage prior to the reorganization of the American Medical Association in 1901 was the fact that we had no name by which to designate the delegates. As soon as the name "House of Delegates" was adopted, then the function of the delegates became clear at once. The Association also has labored under the disadvantage, ever since its reorganization, that there has been no name by which to designate the actual voting membership, because the term "members" had been applied to the supporting body. The proposed change simply recognizes this fact, designating as "members" those who really are members, and designating the supporting members as "fellows."

Up to the present time, the members of the organization have not realized that they are, in reality, members of the American Medical Association. They regard the American Medical Association as something entirely apart from them, something in which they have no interest. These members of the organization are through their elected representatives responsible for what the American Medical Association is doing,

they do not realize this, hence they are not or what it ought to do and is not doing, but interested. They do not appreciate that the House of Delegates of the American Medical Association, which they elect, is the body that is doing the work through the officers, trustees, councils, etc., which they, through their representatives in the House of Delegates of the American Medical Association, select. While only a change in name, I think the subject is of the utmost importance. I hope that all of you will look into it carefully, so as to understand exactly what is intended, and then will explain it to your members at the first opportunity.

WHAT IS THE DIFFERENCE BETWEEN A SERUM AND A VACCINE?

A well known medical authority explains:

"The Nature of Vaccines, Sera and Tuberculins with Special Reference to their Use in the Treatment of Tuberculosis" is the title of a timely article which will appear in the April number of the Journal of the Outdoor Life, the Anti-Tuberculosis Magazine (New York). The article is written by a well known authority on clinical pathology.

The author states that the use of bacteriological preparations, such as vaccines and sera is twofold, both for the purpose of producing immunity against certain diseases and also for the purpose of assisting in the cure of certain disease processes. They are used both upon healthy and upon sick persons.

A serum may be defined as a fluid separated from the clot of blood of some animal which has previously been immunized against the germ or poison of a certain disease such a diphtheria, or hay fever. It is administered to cure a disease process in the human body after the disease has already developed and is not designed as a preventive.

A vaccine on the other hand is a weakened poison or virus of a certain disease such as smallpox or hydrophobia, which is taken from a calf or some other animal afflicted with the disease in question. During the process of the disease in the animal, the poison which the germs of the disease cast off, becomes attenuated. Then, when it is inoculated into the human body, a protective reaction of the healthy tissues against this poison follows and an immunity against the disease is thus produced. A vaccine of this character is designed for use only in a healthy body and is not for use after the active symptoms of the disease appear.

The term vaccine is also used in some cases to apply to attenuated germs which have been weakened, usually by heating or otherwise. These preparations are also called "bacterial-vaccines," or bacterins, in distinction from virus-vaccines. These bacterial-vaccines are employed not only for inoculating the healthy individual in order to protect against infectious disease, such as typhoid fever, the plague, or tuberculosis, but also for inoculating the diseased body in order to stimulate the production of protective substances when the processes of nature apparently are not working sufficiently actively toward recovery.

Tuberculin, of which there are a considerable number of varieties, is a preparation made from the germs of tuberculosis, so treated that the poison ordinarily produced by these bacilli is killed or rendered innocuous. Tuberculin is really a distinct kind of bacterial-vaccine used in the treatment of tuberculosis, and has been employed both for therapeutic and preventive purposes.

REDUCING THE NUMBER OF FEEBLE-MINDED.

After four years' investigation among the population of England and Ireland the Royal Commission compiled statistics which make it evident that the feeble-minded mothers of Great Britain have proportionately twice as many children as the normal. Field workers in this country encounter a similar condition. The feeble-minded are multiplying at twice the rate of the general population. This is largely accounted for by the fact that feeble-minded men and women are lacking in self-control. The result of research work by the Department of Public Charities in Philadelphia confirms the opinion that the rate of propagation of the feeble-minded is far greater than that of the normal. The birth-rate is not an accurate index of permanent increase, since the low mental or financial status of the parents lessens the children's chances of survival. The infant death-rate in the illegitimate Kallikak line, for instance, was about six time as great as in the legitimate line.

Still, the fact that such defective lines are able to increase at all and to perpetuate themselves for generations is sufficiently disquieting. It is notorious that the offspring of feeble-minded parents are especially liable to inherit the defective mentality. According to Goddard, about 65 per cent. of all the feeble-minded owe their condition to heredity. It thus becomes apparent that the one great problem in the prevention of feeble-mindedness is the prevention of reproduction by those who are thus afflicted.

Many tentative experiments have been made along the line of sterilization. Indiana, Washington, California, Connecticut, Nevada, Iowa, New Jersey and New York have all passed laws which provide for some form of sterilization of feeble-minded and certain criminal types. Pennsylvania is prevented from having such a law only by the governor's veto of the bill. Kansas and Nebraska have both made experiments with this method of dealing with sexual offenders. For political reasons both of these states have had to abandon the practice at least temporarily . The New Jersey law, though far-reaching and carefully planned to avoid abuse while lending itself to the aid of scientific research, has not been in effect long enough to warrant conclusions as to its practical outcome. Indiana has given the sterilization plan the most thorough trial of all. In that state the practice of vasectomy on certain crim-

inal types has been legalized for the last seven years. In the reformatory at Jeffersonville about three hundred men have been operated on.

When the whole subject is viewed from a practical point of view the arguments for sterilization of the mentally defective seem greatly to outweigh the sentimental reasons advanced against it. Many inmates of institutions for the feeble-minded could be kept safely at their homes and at least help to earn their own living, were it not for the opportunity to reproduce their own kind which such liberty would give them. Although segregation of this class during the whole of the reproductive period is effective in its results, it carries with it a financial burden which seems unnecessarily large. Considered in all its various aspects, says *The Journal of the American Medical Association,* it would appear that the most practical plan for the elimination of the feeble-minded strains should judiciously combine the methods of segregations and sterilization.

ADVANCED REQUIREMENTS IN PENNSYLVANIA.

Dr. J. M. Baldy, president of the Bureau of Medical Education and Licensure of Pennsylvania, reports that at a meeting held at Harrisburg, Nov. 1, 1912, it was voted that after Jan. 1, 1914, the bureau would require for admission to medical colleges, in addition to a standard four-year high school course or its equivalent, not less than one year of college credits in chemistry, biology, physics and a modern language other than English, or the equivalent thereof as determined by the Bureau of Professional Education; and for examination for license to practice medicine in the State of Pennsylvania, a year of service as intern in an approved hospital, or a year of aproved post-graduate instruction, and that the necessary amendments to the medical practice act be secured at the coming session of the legislature. If this legislation is secured Pennsylvania will be the first State to require that every applicant for a license to practice medicine within its borders must have held an internship in a hospital. Pennsylvania therefore, has the opportunity to be the first State to demand this most desirable qualification for licensure.

INSURANCE COMPANIES PREFER EXAMINERS WHO ARE SOCIETY MEMBERS.

A few years ago a certain life insurance company wanted a medical examiner in a certain locality. My advice and judgment was solicited. I recommended a physician who I though possessed every qualification, but, to my chagrin, he was rejected. The company said that while it was not imperative that their examiners should belong to a medical society—all else being equal—they would give a preference in favor of a member over one who was not. The doctor whom I recommended did not belong to a medical society.—He does now.—*Dr. Scott in Lancet-Clinic.*

AMENDMENTS TO BOARD OF HEALTH LAW.

(The following Bill making important changes in our State health law, was introduced by Dr. F. F. Farnsworth of Upshur county and pressed to its passage.—EDITOR)

A BILL to amend and re-enact sections, 1, 3, 4, 5, 6, 16, and 19, of Chapter 150 of the Code nineteen hundred and six, as amended and re-enacted by the Acts of the extra session of the Legislature of one thousand nine hundred and seven, in Chapters 11 and 12, and by the Acts of the Legislature of one thousand nine hundred and nine, at its regular session, in Chapters 72 and 73, and relating to the State and local boards of health and offenses against the public health, and to add four new sections to be known as 7a, 19a, 21a and 21b to said chapter.

Be it enacted by the Legislature of West Virginia:

Section 1. There shall be a State Board of Health in this State, consisting of two physicians residing in each of the congressional districts thereof, and, until such a time as a bill redistricting the State is passed by the Legislature, two members at large. Said physicians shall be gradpates of reputable medical schools, and shall have practiced medicine for not less than six years continuously before their appointment, and no two members shall be residents of the same county when appointed; any member of the board moving into a county already the residenec of another member, shall vacate his office. The Governor shall, in the month of May, in the year one thousand nine hundred and thirteen, appoint said physicians who shall be divided into two classes, each class consisting of one physician from each congressional district, and until such a time as a re-districting bill is passed, one at large.

The term of office of each class shall begin on the first day of June, in the year of their appointment. The term of office for the first class shall continue two years and of the second class four years, and until their successors are appointed and qualified. When the term of office of either class, or of any of said physicians, expires, the Governor shall appoint their successors for the succeeding term.

The Governor may in like manner appoint physicians to fill any vacancy that may occur in the Board, but any appointment to fill a vacancy shall be for the unexpired term.

The term of office of the members of the State Board of Health, now in office, shall be continued by the Governor for the term of their appointment, but at any time upon a re-arrangement of district lines, or the formation of a new district in which two or more of the members live whose term of office expires at the same time, the Governor shall have authority to remove, appoint or regulate the offices in conformity to this Act.

Sec. 3. Said Board shall on a day to be fixed by them in every two years, elect from their own number, a president who shall hold his

office for the term of two years, and until his successor has been elected and entered upon his duties.

The Board shall also have a secretary named by the Governor who shall be one of their number, who shall be ex-officio State Health Commissioner, and as such exercise all the powers conferred upon him by this chapter, carry out all rules, regulations and orders of the board, and exercise all other powers pertaining to offices of like kind. Said secretary shall be, when appointed, a physician in active practice; but during the term of his office the secretary shall devote his whole time to the duties of the office. The said board shall be a corporation by the name and style of the "State Board of Health of West Virginia," and have and use a common seal, and as such corporation may sue and be sued, contract and be contracted with, plead and be impleaded with, to the extent of the powers conferred upon them by this chapter. Said board may make and adopt all necessary rules, regulations and by-laws, not inconsistent with the laws or the constitution of the State or the United States, to enable it to perform its duties and transact its business in conformity to the provisions of this chapter. A majority of the board shall constitute a quorum for the transaction of business. The secretary shall call all meetings of the board upon orders of the president or the written request of any three members thereof.

Sec. 4. The secretary shall be the recording officer of the board, and in addition to the other duties prescribed in this chapter, he shall respond to all communications from any member of the State Board and other reputable physicians, and from officers of the State, and give them such information and advice as may be necessary from time to time as to measures of sanitation, or other matters connected with public health and safety. He shall be the custodian of all books and papers, instruments or appliances, belonging to the State Board of Health, or that may be invested in his care. He shall also do and perform such other duties as the state board may lawfully direct, and in case of the prevalence of epidemic, endemic, infectious and contagious diseases, or other unusual sickness, he shall, upon the request of the local health officers, visit the locality and advise with such health officers as the State Board may direct, and aid in the adoption of such regulations for its suppression as may seem best.

He shall annually report to the Governor, on or before the first day of January, each years' investigations, discoveries and recommendations of the board, which shall be printed and distributed as soon as practicable thereafter in the same manner as other public documents of the state, except that the Governor may cause said report to be printed and distributed annually.

Sec. 5. The Board of Health is invested with all the rights and charged with all the duties pertaining to organizations of like character, and shall be the sole advisor of the State in all questions involving the protection of the public health within its limits, and shall take cognizance of the interests of the life and health of the inhabitants of the State, and shall make or cause to be made, sanitary investigations and inquiries respecting the cause of diseases, especially of epidemics, endemics and the means of prevention, the sources of mortality and the effects of localities, employments, habits and circumstances of life on the public health. They shall inspect and examine the food, drink and drugs offered for sale or public consumption, in such manner as they shall deem necessary, either in person or by agents or employees, and shall report all violations of the laws of this State relating to pure food, drink and drugs, to the Prosecuting Attorney of the county in which such violation may occur, and lay before such Prosecuting Attorney the evidence in their knowledge of such violations. They shall also investigate the causes of disease occurring among the stock or domestic animals in the State; the methods of remedying the same, and shall gather information in respect to the matters embraced in this section and kindred subjects, for the diffusion among the people. They shall also examine into and advise as to the water supply, drainage and sewerage of cities, towns and villages, the ventilation and warming of public halls, churches, school houses, work shops, prisons, and all other public institutions; the veltilation of coal mines and how to treat promptly accidents resulting from poisonous gases. When they believe that there is a probability that any infectious or contagious disease will invade the State from any other state, it shall be their duty to take such action and to adopt and enforce such rules as they may, in the exercise of their discretion, deem efficient for preventing the introduction and spread of disease or diseases. To better accomplish such objects, the State and County boards are empowered to establish and strictly maintain quarantine at such places as they may deem proper, and may adopt rules and regulations to obstruct and prevent the introduction or spread of contagious or infectious diseases to or within the State, and shall have power to enforce these regulations by detention and arrest, if necessary. They may have power to enter into any town, city of corporation, factory, railroad train, steamboat, or any place whatsoever within the limits of the state for the purpose of investigating the sanitary and hygienic conditions and may at their discretion take charge of any epidemic or endemic conditions arising within the limits of the State, and enforce such regulations as they may prescribe. But all expenses for guards, or other expenses incurred in controlling any endemic or epidemic conditions, shall be paid by the county in which such epidemic occurs. The State Board of Health shall cause to be kept in the office of the County Health offices vaccine lymph, diphtheria antitoxin, tetanus antitoxin, or any other serum preventives of disease that they may deem necessary, and furnish them free to the poor and indigent, and in other cases where it may be necessary in their judgment to prevent the spread of contagion. The State Board shall also cause to be kept in the office of the secretary, vaccine

lymph, diphtheria antitoxin, tetanus antitoxin, and any other form of serum preventives of disease that they may deem necessary, and distribute same to county and municipal health officers to be used for the benefit of the poor and indigent, and in other cases where they may deem it urgently necessary to check contagion, free of charge.

Sec. 6. It shall be the duty of the State Board of Health, upon the recommendation of the county court of the county, to appoint in each county of this State, one legally qualified physician, who shall be known as the County Health Officer. His term of office shall begin July 1st, one thousand nine hundred and thirteen, and continue for a period of four years, unless removed by said State Board of Health for good cause. The county Health Officer shall receive an official salary of not less than One Hundred Dollars, and such other amount as the county court may add for additional services, and actual expenses necessary for traveling expenses, unless for work especially done under orders of the State Board of Health. The salary of the County Health Officer shall be paid out of the treasury of the county, and he, together with the president of the county court and the prosecuting attorney, shall constitute the County Board of Health, of which the County Health Officer shall be the executive officer. The county Board of Health shall exercise all the powers, rules and regulations of the State Board so far as applicable to such county. It shall be the duty of every practicing physician to report to the County Health Officer every case of infectious or contagious disease that may arise or come under his treatment, and the county Health Officer shall, at least every three months, make a full report to the State Board, giving the character of all such epidemic, endemic, infectious or contagious diseases, stating the number of cases reported, character of infection, action taken by the county board to arrest the infection, and the results

The jurisdiction of the County Boards of Health shall not extend to any town or city in this State having a Health Board of its own, but they may be and are, auxiliary to each other, and all city, town and village Boards of Health or Health Officers, are secondary to, and subject to all orders of the State Board which may, if deemed expedient, act through the County or Municipal Board. Any failure to comply with any of the provisions of this section, shall be considered a misdemeanor and upon conviction thereof, the offender shall be fined not more than one hundred dollars.

Sec. 7a. It shall the duty of every county or municipal health officer, to meet with the State Board of Health, or its representatives, at least once a year, due notice having been given, at such time and place as said State Board of Health may designate, to attend a school of instruction for the purpose of familiarizing such county health officers with their duties in the interests of public health.

The actual expense of the attendance of such county or municipal health officer, shall be paid by the county or corporation represented by such local officer upon presentation of a certificate, showing the expense of such attendance, made by the State Board. *Provided*, that such expense shall not exceed an amount sufficient to cover an attendance of three days in any one year. Any county health officer may be excused from attending by the State Board for good cause.

Sec. 16. The Secretary of the State Board of Health shall receive a salary to be fixed by the board, not to exceed the sum of three thousand dollars per year, with traveling, clerical and other necessary expense incurred in the performance of his official duties within the limits of the State. The other members of said board shall receive four dollars per day for the time actually and necessarily employed by them in the discharge of duties of their office. The said board shall have power to expend annually, for the purpose of performing the duties imposed by this act, including the maintenance of a laboratory and the employment of necessary chemists, bacteriologists, servants and agents, such sum as may be appropriated by the Legislature for their use. The State Board shall audit all bills made out in due form and verified by the members and employees or agents rendering service or incurring expense or traveling in the performance of the duties of their office or employments. Such bills when approved by the Governor shall be paid out of the State Treasury.

Sec. 19. If a person knowingly sell or expose for sale any diseased, corrupted or unwholesome drugs or provisions, whether food or drink, without making the same known to the buyer, he shall be confined in jail not more than six months and fined not exceeding one hundred dollars.

Sec. 19a. Whenever the State Board of Health has reason to believe that any food, drink or drug, sold or offered for sale, is diseased, corrupted, unwholesome or adulterated, it shall take or cause to be taken by its authorized agent, a specimen thereof and test or analyze the same. And if the result of such test or analysis in the case prove that the said food, drink or drug, is diseased, corrupted, unwholesome or adulterated, the same shall be *prima facie* evidence of such fact in prosecutions under this act. If the board, deeming it necessary, shall cause such food, drink, or drug to be analyzed, the result of such analysis shall be recorded and kept in evidence, and a certificate of such results, sworn to by the person making the analysis, who shall also state under oath in his certificate that he was the first thereunto duly authorized by the State Board of Health, and state also the reasonable cost of such analysis, shall be admissible in evidence in prosecution under this act. The expense of such analysis, not exceeding fifteen dollars in any one case, shall be included in the cost of such prosecutions and taxed in favor of said Board of Health.

Sec. 21a. There is hereby appropriated from any moneys in the State Treasury, not otherwise appropriated, the sum of fifteen thousand dollars annually for the use of the State Board of

Health in carrying out the provisions of the chapter.

Sec. 21b. All acts and parts of acts, inconsistent with this act, are hereby repealed.

State News

THE MAY MEETING OF STATE MEDICAL ASSOCIATION.

This will be held at Charleston May 21-23. Here are a few of the good things in store for those who attend. We look for the best meeting in the Society's history. Public address by Dr. C. A. L. Reed of Cincinnati, former President of the Am. Med. Ass'n. Dr. Andri Croti of Columbus, O., will read a paper on "The Pathology and Surgical Treatment of Goiter," including Diseases of the Thymus. Dr. Crotti was for years assistant to Prof. Kocher of Berne, Switzerland, who has done more work on the thyroid gland than any man in the world. Prof. Smith Ely Jelliffe of New York, the well known alienist, will read a paper, the exact subject of which is not yet announced. Dr. Victor C. Pederson of New York will present a paper on "The Present Status of Syphilis," Prof. E. Otis Smith of Cincinatti, will read a paper on "Surgery of the Prostate." Dr. R. E. Venning, our own member and a surgeon of large experience, will present the "Oration on Surgery,' and Dr. A. A. Shawkey, an internest of high standing, the "Oration in Medicine." Can you afford to miss this meeting?

* * *

The following, from an eastern paper, is very gratifying to the friends of Dr. Clyde Ford, a former Wheeling boy, and member of our Association. Those who knew Clyde will not be surprised at the good work done by him.

AMERICAN OFFICER BATTLES WITH CHOLERA

The action of Major Ford, Surgeon in the United States Army, in giving his services to the plague-stricken Turkish soldiers in the cholera camps, has reflected credit both on his profession and his country.

He was visiting Constantinople on sick leave when the deadly pestilence attacked the Turkish soldiers. He promptly tendered his services and went to the front, where he found confusion prevailing and the Turkish authorities utterly unprepared to meet the ravages of this new enemy. Fifteen hundred men, dead and dying, were strewn along the railroad embankment and about a large field, unsheltered and uncared for. Soldiers who were willing to march to the front and face the bullets of the Bulgarians, shrank from the task of succoring the victims of the loathsome and contagious malady. Many died from lack of attention and exposure. There were no sanitary facilities, no arrangements even for removing the dead.

Major Ford devoted the remainder of his leave of absence to the care of the stricken soldiers. He was assisted by Hoffman Phillips, First Secretary of the American Legation, and Dr. Frew, and these three "foreigners" were the first to bring organized help to the abandoned victims. Two weeks later the cholera patients, the number of which increased to 2,500, were all housed under barracks, sheds and tents, and besides the American Red Cross, the British, Turkish and Egyptian Red Crescent were combining their efforts to fight the infection.

Out on the line of battle men risked their lives to destroy others—to kill. Within, Major Ford and this faithful band of men and women risked their lives to save others—the highest form of heroism.

* * *

IN MEMORIAM.

Dr. Rush H. Dew, a member of Harrison County Medical Society and of the State Medical Association, died after a prolonged illness, of cancer of the throat involving the larynx, on February 21st, 1913.

Dr. Dew received his first training early in life assisting his father, a surgeon in the Confederate Army, and was in continuous practice in the profession for nearly 50 years. The last 35 he resided in Salem, W. Va., where his skill and tact as a physician gave him the confidence of the people in an unusual degree.

(Signed) J. F. WILLIAMS,
D. C. LOUCHERY,
C. N. SLATER, *Committee.*

* * *

We are glad to note that Dr. J. W. Kidd of Burnsville, who was stricken with paralysis several months ago, has so far recovered that he is again out, and recently paid a visit to the town of Sutton. The doctor has long been not only an esteemed practitioner, but a valuable citizen as well, and it is to be hoped that this condition will continue to improve, so that he can soon resume active work.

* * *

During a recent visit to Fairmont, President Hupp of the State Medica Association was entertained at a dinner party given by Dr. Holland of that city. An eight-course menu was served and the dinner was greatly enjoyed by those present, who were Drs. W. H. Sands, C. W. Waddell, J. A. Graham, L. N. Yost, H. R. Johnson, C. O. Henry, L. D. Howard, J. W. McDonald, C. W. Ramage, and the guest of honor, Dr. Hupp of Wheeling. Mrs. Holland was assisted in serving by Mrs. T. B. Jacobs and Mrs. Richard Shurtleff. Dr. Hupp addressed the meeting of the Marion County Medical Association in the evening.

* * *

A recent Morgantown paper contained a criticism of physicians because some one who was sick failed to secure medical attention promptly. Dr. R. W. Fisher very properly came to the defense of the profession, and made these pertinent remarks in the paper:

"Now if inquiry be made in a case of this kind the reason usually found to exist is the fact that the individual in question does not pay his physician's bills despite the fact that he is able to pay them. I am not speaking of those who are unfortunate enough to require medical or surgical attention and who don't pay because they can't—but I refer specifically to that vast army whose

name is legion who 'don't pay because they can but won't.' In conclusion allow me to add that just as 'the laborer is worthy of his hire,' so also is the physician entitled to his pay, and it will be found by those irritable inquirers as well as by others that the best way to obtain physician's services and to obtain them promptly is to pay physicians when they are employed and to pay them promptly—just as those who render aid and service in other vocations demand and receive prompt pay for the same."

Right you are, doctor. Few physicians ever decline to render services to the worthy poor, and we generally know the "dead beat."

* * *

Dr. L. O Rose of Parkersburg, has recently added to his laboratory an X-Ray Department, to be used in the diagnosis of abdominal and chest conditions. The most powerful and modern aparatus has been purchased at a cost of several thousand dollars. Such a laboratory is a great benefit to any community, and this enterprising physician should receive the liberal support of the profession, who will often find his services of the greatest value.

* * *

We are glad to see from the *Southern Medical Journal* that our member from Elkins, Dr. G. C. Rogers, was at the recent meeting in Florida chosen as one of the councillors of the Southern Medical Society.

* * *

Changes of addresses—Dr. L. S. Smith from Gypsy to Monongah.

Dr. J. F. Keeting from Grafton to Mercy Hospital, Baltimore.

Dr. John L. Hankins from Century to Fordwick, Va.

Dr. A. B. Campbell from Middlebourne to Loveland, Cal.

Dr. W. T .W. Dye from Parkersburg to place unknown.

Dr. J. W. Judy from Glady to Glen Falls.

* * *

Dr. J. R. Caldwell of Wheeling, has made a good recovery from an appendix operation, and is spending a few weeks in the southland.

Society Proceedings

AMERICAN PROCTOLOGIC SOCIETY
(Continued from March Number).
COLONIC DILATATION (CONGENITAL AND ACQUIRED) AS A FACTOR IN CHRONIC INTESTINAL OBSTRUCTION (OBSTIPATION).

By SAMUEL G. GANT, M.D., of New York City,

The author stated that his experience warrants the belief that both acquired and congenital (Hirschprung's) dilatation of the colon is fairly common, and that they respond satisfactorily to treatment (usually surgical). He said that non-congenital dilatation of the bowel might result from paresis, gormandizing, digestive disturbances or chronic intestinal obstruction, however caused, and when present, leads to constipation, fecal impaction, distension of the bowel, angulation, twisting and ptosis of the colon. He called attention to the fact that this class of patients suffered much less from intestinal autointoxication than persons afflicted with acute constipation. In his cases, the colon completely filled the abdomen, measured from three to many times its normal size, was considerably thickened, characterized by dilated blood-vessels and closely resembled an enormously hypertrophied stomach—for which it was mistaken in two instances. He mentioned having personally observed seven cases of Hirschsprung's disease and a still greater number of acquired dilatation, wherein the patients had an evacuation every two or three weeks, following purgation and frequent enemata; except in two instances, that of a young boy, who moved his bowels only once in two months, and of a young woman, who succeeded in accomplishing this but four times yearly. He said the chief manifestations of the condition were those of chronic constipation and fecal impaction, plus mal-nutrition, abdominal distension, pot-belly, extraordinary length of time between the movements and very large amount of feces discharged when an evacuation occurred, and that the diagnosis is fairly easy in the presence of the above symptom complex, because, with the aid of inflation and palpation or the assistance of the X-ray, the size and position of the colon can be defined.

The writer maintained that temporary improvement occasionally follows medication and physical measures, which strengthen the bowel or minimize the effects of autointoxication consequent upon fecal retention, and that patients may for weeks or years be kept fairly comfortable when given close attention and the bowel is kept open with lubricating oils, laxatives and frequent high enemata, but that a cure is not possible except through one of the following surgical measures, viz;—

1 Coloplication; 2 Colopexy; 3 Resection; 4 Intestinal exclusion; 5 Colostomy; 6 Tapping.

He found coloplication effective in both congenital and acquired dilatation, without bowel displacement. Colopexy proved satisfactory where there was ptosis with moderate dilatation, but, in aggravated cases where the bowel was both enormously dilated and markedly ptotic, he advised coloplication and colopexy, using the infolding sutures for suspensory purposes.

He advised resection of all or part of the colon where it was irretrievably large, displaced or bound down by adhesions, and reported a case where the sigmoid flexure, descending colon and left half of the transverse colon were excised.

Exclusion had proven satisfactory, and he reported five cases treated by dividing the ileum near the cecum and completing the exclusion by ileo-sigmoidostomy.

Colostomy was looked upon with ill-favor, because patients strenuously object to an artificial anus, and a secondary and dangerous operation is required to re-establish continuity of the intestines.

Tapping, he said, deserved no consideration, because it is unscientific, dangerous and ineffective.

In closing, Dr. Gant said that he frequently combined the above operations with appendicostomy or cecostomy, so that through and through irrigation could be immediately established and the period of convalescence shortened. He also stated that colonic exclusion and colostomy were considerably less dangerous than resection, and were usually effective, since the bowel rapidly contracts after their establishment.

ACUTE POST-OPERATIVE INTESTINAL PARESIS.

By J. A. MACMILLAN, M.D., of Detroit, Mich.

1. Definition:—A paralysis of a portion of the intestine which suddenly dilates and becomes the receptacle for gas and fecal material.
2. Etiology:—Not known, but probably due to sepsis, trauma, etc.
3. The lesion is probably in the sympathetic nervous system.
4. The treatment consists of gastric lavage, enemata, and enterostomy.
5. Precautions attending a secondary operation.

INTRA-RECTAL RUPTURE OF SUPPURATING SINUS FROM HIP-JOINT DISEASE.

By RALPH W. JACKSON, M.D., of Fall River, Mass.

To meet the difficult problems presented by an unusual case, involving the rupture, internally, into the rectum, and externally, near the anus, of a sinus from a tubercular hip, the writer has sought by radiographic study, research of literature and correspondence with proctologic and orthopedic authorities, information as to frequency, pathology and operative possibilities, of such cases; and with the following conclusions:

1. That intra-anal or rectal rupture of a coxitic sinus, occurs rarely but not with extreme infrequency.
2. That such opening, involves probably considerable mixed infection of the joint beyond what would occur if the opening were external
3. That likewise tubercular infection of the rectum might arise.
4. That intra-anal opening is quite easily treated and much of the mutual risk of infection removed.
5. That intra-rectal opening is in most cases (unless the sinus approaches from low down) too high to turn aside in any way and drive an external discharge and consequently the risk must continue.
6. That operating for such purpose is likely to create at once a complete rectal fistula where none existed before, because of the surgical difficulties in the way of securing permanent closure of the internal opening.
7. That it is a very rare and most unfortunate occurrence for such abscess to point both externally and internally; an external incision should be made, if sure that internal rupture has not occurred; but avoided, if possible, if it has occurred, because of the fistula thereby created.
8. That whatever the etiology, such a fistula is a particularly troublesome one, and the wisdom of trying to better it surgically is fairly debatable ground.

EASTERN PANHANDLE SOCIETY.

MARTINSBURG, W. VA., March 25, 1913.

Editor W. Va. Medical Journal:

A regular meeting of the society was held in Hotel Berkeley, Martinsburg, on March 12th. The meeting was well attended, and a pleasant and profitable day was spent by the members and guests. It was a treat to have with us the President of the State Association, Dr. F. L. Hupp, and we are sure that his most excellent paper, read at the meeting, and his presence with us, will be very helpful to our society.

The delegates to the meeting of the State Association were chosen, viz.: Dr. W. T. Henshaw of Martinsburg, S. T. Knott of Shepherdstown, and Howard Osburn of Rippon. Alternates are: Drs. J. McKee Sites, Martinsburg; J. M .Miller, Charles Town, and C. R. Fouche, Berkeley Springs.

Those present were as follows: Drs. Frank LeMoyne Hupp of Wheeling, Miller of Charles Town, Osburn of Rippon, Lucas of Kearneysville, Knott of Leetown, Perry of Halltown, Nawrath of Berkeley Springs, Swimley of Bunker Hill, Fouche of Berkeley Springs, Claybrook of Cumberland, Oliver of Swan Pond, Johnson of Duffields, Brown of Shenandoah Junction, Shipper of Gerrardstown, Fry of Hedgesville, Lemaster of Bedington, Lefever of Bunker Hill, Oates, Osburn, Eagle, Clay, McCune, Henshaw, Sperow, Miller, Hedges, Bitner, Sites, Evers and Myers of Martinsburg.

In addition to the excellent paper of Dr. Hupp, a paper on "A New (?) Bacillus" was read by R. W. Miller of Martinsburg, and one on "Internal Injuries" by Dr. E. B. Claybrook of Cumberland, Md. A. B. EAGLE, *Secretary.*

THE CABELL COUNTY SOCIETY.

HUNTINGTON, W. VA., March 14, 1913.

Editor W. Va. Medical Journal:

The regular monthly meeting of this Society was held in the Hotel Federick last evening.

Dr. Chas. T. Souther of Cincinnati was with us and gave a very interesting and helpful lecture on "Uterine Displacement and Its Surgical Treatment," illustrated with lantern slides.

Drs. E. R. English, Guy Yost, D. J. Cronin, J. C. Schulz (all of Huntington) and A. W. Adkins of Griffithsville, W. Va. were elected to membership.

It was also decided to incorporate the Society and a committee consisting of C. T. Taylor, H. C. Solter, A. K. Kessler, F. A. Fitch and L. T. Vinson was instructed in take out charter from Secretary of State.

Drs. H. J. Campbell, A. K. Kessler, H. C. Solter and F. A. Fitch were elected delegates to the State Ass'n meeting.

After the meeting lunch was served in the cafe. Fraternally yours,

JAS. A. BLOSS, *Sec'y.*

KANAWHA COUNTY SOCIETY.

CHARLESTON, W. VA., March 19,1913.

Editor W. Va. Medical Journal:

At a recent meeting of the Kanawha Medical Society, the secretary was instructed to send to the editor of the West Virginia Medical Journal, for publication in the next number the following resolution passed by the Society:

RESOLVED, That the Kenawha Medical Society as a whole will not indorse in advance of the meeting of the State Society any member as a candidate for the presidency of the State Association.

Sincerely yours,

G. P. CAPITO, *Sec'y.*

LITTLE KANAWHA & OHIO VALLEY SOCIETY.

PARKERSBURG, W. VA., March 20, 1913.

Editor W. Va. Medical Journal:

At the meeting of the Little Kanawha and Ohio Valley Medical Society held Thursday evening at the Chancellor hotel, the Society had as its guest of honor Dr. Frank LeMoyne Hupp, of Wheeling, president of the West Virginia State Medical Society, who had kindly consented to visit us and deliver an address instead of our usual program.

Previous to the meeting the Society gave a banquet. Around the table were gathered many of the members and invited guests from within and out of the city. After the inner man was satisfied the tables were removed from the parlor and the Society met and listened to Dr. Hupp's masterly address. His subject was not a purely medical or scientific one, but one pertaining to the the profession. "The County Medical Societies, Their Objects, Needs and Possibilities." The paper is too long for fair abstracting. He considered them from these three points of view:

First, he considered the objects of these societies. He alluded to them as scientific clearing houses, where the members of the profession should thresh out the various scientific matters which pertain to the practice ;exchange views as to points of difficulty which arise in our daily work; hear the papers on selected subjects from members to whom the work is assigned, who prepare them, giving the results of their studies; personal experience, or thus draw out that of others. From the specialists learn the latest in special work; or from the general practitioner facts co-related to each other coming up in thee broader field in which he labors.

Here also are rubbed off the asperities and jealousies which arise in competition by social contact; and one learns that the other fellow is not as black as he is judged but good fellow after all. He learns that the state and national society need the presence of the county medical society and from its influence in the county it helps the state and national societies; that the county society is the foundation from which and by which access to membership in the State and National Society is gained.

That medicine is a science and also an art. The art of medicine is largely acquired in the Societies or the field of practice; the science from books, journals and schools.

The progressive doctor cannot remain stationary, that he must continue throughout life to burn the midnight oil, reading, thinking, learning, and that this he can do most thoroughly by touch with his fellows; in attendance in post graduate courses; seeing other men do things; by use of medical libraries and medical journals; and lastly keeping track, elbow to elbow, with his fellow soldiers in the field; in attending first his county society, the state and when possible the national and other general societies, where he will meet the brightest minds of the profession from home or abroad; for medicine is cosmopolitan, universal.

He spoke of the men who never had time to attend societies or said that they could not learn anything from them, as giving a false excuse for their selfishness, their indolence or want of any stimulus outside of their supreme egotism that they knew it all.

Much more he told us. One point he pressed upon us, that the masters of medicine, surgery and allied subjects were always the men who found time to steal away from the press of business to the medical societies and there either give something of value to their fellows or eagerly learn something of equal value from their fellow-members, and he hoped that this and every other County Society would prosper, and that when he went to the meeting at Charleston of the State Society next may he could report all the constituent local societies were prosperous, and none more so than he found this society, and that the day would come when every worthy medical man in the counties included in this territory would not only be an enlisted member, but would also be so loyal that whenever possible he would be in attendance, giving to as well as taking something away from the meeting.

W. H. SHARP.

MERCER COUNTY SOCIETY,

March 26th, 1913.

Editor W. Va. Medical Journals

I write to report to you our last meeting of the Mercer County Medical Society. The meeting was held in the Chamber of Commerce, Bluefield, W. Va., on the evening of March 15th, 1913, Dr. E. M. Easley, president, in the chair.

The following papers were read and discussed:

"The Care of Pneumonia Patients."—Dr. H. R. Fairfax.

"How May We Improve Our Society."—Dr. E. H. Thompson.

"Some Remarks On the Value of X-Ray Plates —With Demonstration of Some Plates."—Dr. T. H. Becker.

Dr. A. H. Carr, New Hope, W. Va., was made an honorary fellow.

Two applications for membership were presented to the board of censors.

Dr. F. W. Barger, Hiawatha, W. Va., was elected to membership in the society.

After adjournment the society was entertained at a delightful smoker given by Dr. C. M. Scott, of Bluefield W. Va.

I wish to say, doctor, that our society meetings are well attended; there were seventeen present at the above meeting. We usually have more,

and the men are taking a good deal of interest in the programmes. Our next meeting is in May.

With kind wishes, I am,

Sincerely yours,

C. F. ST. CLAIR, Secy.

Reviews

GOLDEN RULES OF SURGERY.—By AUGUSTUS C. BARNAYS, A.M., M.D., F.R.C.S., Eng., etc. 2nd Edition, revised and rewritten by W. T. Coughlin, M.D., Ass't Prof. of Surgery, St. Louis Univer. Med. School, 200 pages Oct. C. V. Mosby & Co. St. Louis. Price $2.25.

This little book contains many cardinal principles and oft-forgotten facts set forth in the most concise form possible. Its many don'ts are particularly impressive and helpful. The great importance of history taking and the thorough physical examination of patients is pointed out on every side. The perusal and careful consideration of this book would be well worth the time of any physician, and there is no doubt that he could glean much valuable information therefrom.—J. E. B.

PRINCIPLES AND PRACTICE OF OBSTETRICS.—By JOSEPH B. DE LEE, A.M., M.D., Professor of Obstetrics at the Northwestern University Medical School. Large Octavo of 1060 pages, with 913 illustrations, 150 of them in colors. Philadelphia and London: W. B. Saunders Company, 1913. Cloth $8.00 net; Half Morocco, $9.50.

The author of this work is well known to the profession by his excellent book on Obstetric Nursing, as also by his many contributions to current medical literature. He has had, as teacher and hospital physician, abundant opportunity for that experience which every man who attempts to teach a subject that is as well taught as this has been by several recent works on Obstetrics, should have. The result plainly shows in the book before us. The author's division of the subject before him is logical and practical, the different sections treating of the physiology of pregnancy, labor and the puerperium ;the hygiene and conduct of pregnancy and labor; the new-born child; pathology of pregnancy, labor and the puerperium; obstetric operations. To the last named subject are devoted 152 pages, indicating that it is very fully covered. In fact every condition that the practitioner is liable to meet with is fully treated of and in a very satisfactory manner. The less important themes are in small types. The hygiene of pregnancy is carefully presented, and here we have the latest teaching on a subject that should receive the constant attention of the doctor doing obstetric work. The mechanism of labor is presented in a highly satisfactory way, as are the general directions for the conduct of labor. Post partum hemorrhage is presented in an unusually satisfactory way. The chapter on the toxemias of pregnancy is full and satisfactory. We have read it all with profit, as also that on extra-uterine gestation. The treatment of cases of deformed pelvis is worthy of special mention. The work as a whole is most excellent. The illustrations are largely new, very beautiful and instructive. The printing, paper and binding are all that any one can desire. Altogether the work is a sumptuous one, and it perhaps contains more facts of value to the practitioner than any similar work now before the profession.—S. L. J.

NEW AND NONOFFICIAL REMEDIES.—1913, containing descriptions of the articles that have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. Press of the Am. Med. Ass'n. Paper 25c. Cloth 50c

This little book contains a lot of information that is difficult to find elsewhere. Many of the remedies described have now come into quite general use, and where else can one find a full account of them? Not many have yet gotten into works on Materia Medica. Atophan, col largol, the various vaccines, and a host of others are here presented. Send for a copy of the book. It is useful.

INTERNATIONAL CLINICS.—A quarterly of clinical lectures and especially prepared articles on medicine, surgery, treatment, neurology, gynecology and other branches of medicines. This is Vol. I of the 23d series, indicating that the medical public has in this quarterly publication found something worthy of continued support. Abrams, McArthur, Boggs, Cattell and Walsh are a few of the men of note who are contributors to this volume. Price $2.00. Lippincott Co., Phila., publishers.

MAKING GOOD ON PRIVATE DUTY.—J. B. Lippincott C., Phila. Price $1.00.

This little book is a West Va. product, the authoress Harriett C. Lounsbery, R. N., President W. Va. State Nurses Ass'n. It is the outcome of the writer's experiences in actual practice as a trained nurse. She gives most wholesome advice to the nurse in her relations with the patient and family, the doctor, friends, etc., tells how to care for herself, how to employ leisure time—if she has any—adds practical advice on obstetric nursing, treatment of the baby, gives a list of good reading for the nurse, and a number of tried recipes for articles of diet for the sick. The book is interesting and the nurse will find in it many valuable hints.

Medical Outlook

ULCER OF THE STOMACH.

Dr. William Fitch Cheney, the Clinical Professor of Medicine in the Stanford University of San Francisco, in a very helpful paper describing the variations in the clinical picture of gastric ulcer thinks that "stomach disorders and dyspepsia still remain among the most frequent of complaints. Not every case of self-labeled stomach disorder, by any means, is due to primary disease of the stomach; and the fact has now been very definitely proved, by the investigations of many observers, that the stomach is frequently the organ to make the outcry when some other organ is really the injured one. Again and again

this happens, so that one learns by experience to be sceptical in this day about the meaning of stomach symptoms. Yet organic gastric disease still exists :and the problem of sifting the true from the false is no less interesting because the true has been proved to be less frequent than we used to believe.

Of the two great and serious organic diseases that affect the stomach—ulcer and cancer—the former is the one that causes by far the more trouble in diagnosis because it lasts the longer. Mistakes in the recognition of cancer do not long remain undiscovered, for the disease progresses rapidly and developments occur that soon bring about a revision of the original conception of the case. Ulcer, on the other hand, gives rise to an increase and decrease of symptoms throughout a number of years, so that at one time its existence seems a certainty, while at another one concludes that an error must have been made. All too frequently this indecision and hesitancy goes on until some serious complication forces an accurate diagnosis to be made by operation or by autopsy. Hence, in spite of what has been written on the subject of ulcer of the stomach and is constantly being written, there is still room for discussion in regard to many of its phases."

In concluding his paper Dr. Cheney has said that a number of facts stand out that deserve to be emphasized. They are as follows:

"(1) There is no absolutely certain clinical history of ulcer; for the symptoms vary widely in different cases and at different times in the same case.

(2) Nocturnal pain, arousing from sleep, does not always mean duodenal ulcer, as so great an authority as Moynihan would have us believe; for, as proved by the cases reported, it may occur as well when the ulcer is gastric and far from the pylorus.

(3) Hematemesis may never occur in the course of a chronic gastric ulcer, and its absence from the history is no bar to the diagnosis.

(4) Vomiting of any kind may never take place throughout the entire course of the ulcer history.

(5) Pain is the one symptom that most unfailingly presents itself at some time and is the most constant complaint in most cases; but this pain varies greatly in severity in different cases and at different times; also as regards the site at which it is felt and the time after eating at which it occurs.

(6) It is always important, in estimating the meaning of a gastric history resembling that of ulcer, to remember the possibility of reflex gastric symptoms from chronic appendicitis, or chronic cholecystitis, or intestinal parasites such as tapeworm, as well as the gastric crises of locomotor ataxia."

The full text of this excellent paper may be found in the *Interstate Medical Journal* of August, 1912.—F. L. H.

McILROY, THE PHYSIOLOGICAL INFLUENCE OF OVARIAN SECRETION.

Proc. Roy. Soc. Med., 1912, v, 342.

By Surg., Gynec. & Obst.

This consists in a rather exhaustive review of the above subject, taking it from many standpoints, and the second part consists of experimental work. This experimental work can best be summarized in the word of the author.

1. "The ovary controls the nutrition of the uterus and other reproductive organs, since removal of both ovaries causes atrophy of the muscular and glandular elements of the uterus, etc., the degree of the atrophy being in direct proportion to the length of time which has elapsed since the operation. There is also a diminution in the uterine blood-vessels, and a tendency to atheroma—condition very closely allied to fibrosis of the uterus in the human subject. Menstruation and œstrus do not occur after complete removal of both ovaries. In young animals, after oöphorectomy the infantile is maintained."

2. "Removal of the uterus, or retention of uterine secretion, does not affect the functional development of the ovaries, seeing that the elements of the ovary are well preserved after hysterectomy and ligation of the uterine horns. Retained uterine fluid does not counteract the atrophy of the uterus which takes places after removal of both ovaries. There is thinning out of the uterine wall at the point of greatest distension, and no compensatory hypertrophy has been observed."

3. "Removal of one ovary causes compensatory hypertrophy of the other in the anœstrous state."

4. "That the interstitial cells perform the chief role in the maintenance of the nutrition of the uterus is evidenced by (*a*) the survival of these cells in grafted ovaries, (*b*) the follicles becoming absorbed or cystic, and (*c*) the fact that no atrophy of the uterus occurs when these cells become functionally active during pro-œstrum, as shown by their being enlarged and their cytoplasm becoming infilterated with a liqoid substance (in female dog). That the corpus luteum is the part of the ovary which exerts the most active influence upon the body as a whole is shown by the fact that corpus luteum extract, when injected, causes rise of the general blood pressure."

5. "From the result of one experiment it was found that the ovaries do not play such as important part in the elimination of calcium as is supposed, since after castration the calcium output was increased, whereas it was diminished as the result of administration of corpus luteum extract."

6. "Removal of the ovaries in rabbits causes an increased deposit of fat in the tissues of the body."

C. G. GRULEE.

SACRO-ILIAC DISEASE.—ETTA CHARLES, M.D., in *Jour. Ind. Med. Assoc.*

The increasing helplessness of pregnant women as they near delivery, the pains in the back, the

tardiness of convalescence, and the permanent lame back in many cases have often been observed and attributed to ovarian, uterine or fallopian disease. The pelvic articulations are really movable joints. The sacrum is not a keystone, but hangs between the pelvic bones and with it the whole weight of the body. There is an exaggerated relaxation of the ligaments often during pregnancy, and often during menstruation. Injuries in this region are often the cause. Backache, which is not relieved by treating uterus and adnexa, pain in the bullocks or along the sciatic nerves, sometimes lameness, atrophy of leg, muscles, or shortening of one leg and inability to rise from a low chair without the use of the hands. A case in a man with gonorrheal rheumatism is given, patient growing worse under Neisser bacterin treatment and only getting relief when the joint was treated by extension and splints.

Drs. J. V. Reed, Hannah Graham and Alice Williams in the discussion which followed, all substantiated Dr. Charles' statement. They were unanimously of the opinion that the sacro-iliac articulation does not receive the consideration which it deserves as a cause of many pelvis troubles. Strapping with broad adhesive bandages is recommended. Also placing the abdominal binder in parturient cases around the hips also, and fixing it firmly to support the pelvic joints.—G. D. L.

VALUE OF THE WASSERMANN REACTION.

Dr. W. C. Stoner, after an extensive study and experimentation,(*Cleveland Med. Jour*, Apl.), draws these conclusions:

1. The test should be used only in the light of clinical findings.

2. Its real value depends upon its interpretation and a knowledge of its limitations.

3. A positive reaction means syphilis (excluding a few non-syphilitic conditions that give the reaction). A negative reaction may or may not be of any value.

4. Variations in the percentage of positive reactions in the various manifestation of lues, as reported by different careful observers, is probably due to two factors, viz: (1) Lack of uniformity of technic on the part of serologists, some making the test too sensitive others not sensitive enough. (2) The class of cases selected.

5. A single positive reaction obtained in every case of suspected or clinically diagnosed lues must not be regarded as conclusive without knowing the character of the work done by the serologist.

6. Its greatest diagnostic value is in obscure conditions and for differential diagnosis.

7. Every case of suspected or clinically diagnosed lues should have a Wassermann blood serum test for two reasons, viz: 1. To establish or strengthen a diagnosis. 2. To determine the efficiency of therapy.

ARTIFICIAL MILK.

Synthetic milk is the latest product of the chemical laboratory. Several eminent scientists, including Sir William Crookes, examined and tasted cowless milk at a demonstration in London and pronounced it palatable.

The fluid, which is the discovery of three German chemists, is made at Frankfort-on-the-Main. It is the same color as the animal liquid, and the inventors claim it is more nourishing and more easily assimilated than the cow's product, and nontuberculous.

The method of manufacture is kept secret, but it is composed entirely of vegetable ingredients, digested by machinery instead of by the cow, and is said to keep sweet far longer than ordinary milk. Its strength, it is said, can be standardized for the family, infant, or invalid.

It is proposed to build a factory in London to make and sell the family variety at six cents a quart.—*American Practitioner.*

RESULTS OF LIGATURE OF ONE URETER

Drs. Frank and Baldouf, after a study of this subject (*Surgical Annals, Sept,* VTVB), draw these:

1. Ligation of one ureter is followed by a primary hydroureter and hydronephrosis, which results in ultimate destruction of kidney function as a result of pressure atrophy of the secreting tubules.

2. Not infrequently infection and suppuration of the kidney may follow ligation of its ureter, due to lessened resistance in the kidney as a result of circulatory changes.

3. The microscope shows very strikingly that the greatest effect histologically is exerted upon the tubular structures and that the glomeruli are only slightly involved as a result of the fibrous deposits accompanying atrophy. (This will be the subject of further study.

4. Pyelo and pyonephrosis may occur from haematogenous infection in such kidneys, leading to their complete destruction functionally and anatomically.

5. Experimental animals may present no apparent symptoms though suffering from marked hydro or pyelonephrosis. This may possibly be true in man as regards subjective symptoms.

6. Embolic septic processes may ensue following haematogenous kidney infections though the latter present no apparent symptoms.

7. The litigation of the ureter for the purpose of eliminating the kidney or its function in the presence of ureteral fistula or the accidental ligation of a ureter is not without danger, and under such conditions if restoration of the lumen of the ureter is impractical or impossible, nephrectomy should be the procedure of choice.

8. Ureteral fistulae are sometimes spontanously cured by cicatrization and oclusion of the ureter and secondary atrophy of the kidney.—*Old Dominion Jour.*

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Original Articles

CHILD WELFARE.

S. L. Jepson, M.D., Wheeling, W. Va.

(Read at meeting of Ohio Co. Medical Society.)

"There was a wailing nine-months old baby tossed by its mother into a life boat, that will probably grow up without knowing who its parents were."

This little message was flashed over the land after the terrific Titanic disaster amid the sea of ice on the northern Atlantic a year ago. Whether the baby's sudden separation from a fond mother was the happiest fate or not depends largely on the character of the mother who but for the dread disaster would probably have reared it to manhood or womanhood. Not all parents are fit to beget or rear children. We are striving to lessen the number of the diseased, degenerate, and altogether unfit parents of the world, and this is a work of years, or generations rather. But this is a better age for babies than any that has preceded it; and all over the civilized world are movements in progress for the alleviation of the ills of all sorts with which childhood has to contend. Ignorant parents, diseased parents, vile parents, degenerate parents, will diminish in numbers as the years go by, because of the active efforts and charitable deeds of good men and women throughout the Christian world.

Dr. Stanley Hall has beautifully said that "everything is right that makes for the welfare of the yet unborn, and everything is wrong that injures them. To wrong them is to commit the unpardonable sin, the only one that nature knows. Every human institution—the home, the school, the State, the Church—is organized primarily to bring the children to the brightest possible maturity. The institutions of all science and civilization are graded and valued by just how much they can contribute to this prime end." The trend of the times may be well illustrated by the action of the Indiana State Board of Health, which has adopted this Child Creed:

"Every child has the inalienable right to be born free from disease, free from deformity, and with pure blood in its veins and arteries. Every child has the inalienable right to be loved; to have its individuality respected; to be trained wisely in mind, body and soul; to be protected from disease, from evil influences and evil persons; and to have a fair chance in life. In a word, to be brought up in the fear and admonition of the Lord."

That the results here aimed at may be secured, we must adopt the suggestion of Dr. Holmes, and begin the training of children a hundred years before they are born; in other words, the parents and grandparents must be selected, trained and educated in the best possible way. There are movements on foot today that *tend* in this direction, at least, so that the future of the child is to be made more safe, and the child of the future is to be a more healthy and a better trained child, and therefore a better and more useful citizen than are those of the present. To this end Boards of Health and Legislatures are moving as the years go by. The authorities of Indiana seem to be the most progressive in these matters. The law

requiring the sterilization of criminals is a move intended to diminish the propagation of criminals and defectives. The Ohio law requiring the prospective bride and groom to appear together before the Probate Court which grants the license has a similar purpose. The movement toward legislation along this line in a number of States is spreading, and meeting with very general approval.

Someone has said that infant mortality is the most sensitive index we posesss of social welfare. But how very slow are the people in realizing this fact. We have become so accustomed to hear of the excessive death rate among infants, that we do not readily realize the possibility of materially reducing it by active efforts. But there are always some among us who are quick to appreciate the necessity of the time, and so there was organized, several years ago, "The American Association for the Study and Prevention of Infant Mortality," whose objects are:

"To study infant mortality in all its relations; to disseminate knowledge concerning the cause of infant mortality; to encourage methods for the reduction of infant mortality. The functions of the association are: To educate and enlighten the public; to stimulate better sanitary organization and administration throughout the country; to promote more adequate registration of births; to correlate existing activities now working independently; to stimulate investigation into causes of infant mortality."

This beneficent association now holds a meeting annually, and its possibilities for good can scarcely be estimated.

To enumerate all the causes of infant mortality would take too much space, but we may name illegitimacy, poor care of pregnant women, syphilis of the parents, lack of proper care in confinement of the mothers, lack of breast feeding, defects in artificial feeding, -poverty, ignorance, unhygienic living of parents, including bad ventilation or the entire absence of it in the home. These can be corrected only by persistent efforts to educate the people. In this physicians have ever been foremost, not only as individual members of the profession, but in their organized capacity in medical societies, and in Boards of Health, generally largely composed of physicians. The Health Departments of cities may be truly said to be the guardians of the health of children, just as the Department of Education is the custodian of their mental development. Without health education can not be effective. The child, representing, as he does, the citizen of the future, always offers the most promising field for preventive medicine; and it is for the child that many of the newer activities of some health departments have been organized. The first work for the protection of children in New York City was some years ago, when the Health Department appointed a corps of physicians in the summer to instruct mothers how to prevent diseases in infants. Since then the summer corps doctors and nurses have been familiar and welcome visitors in thousands of tenement homes. In addition to these men and women who instruct mothers in the care of children, are many nurses from the Health Department who visit the homes and instruct mothers in methods of infant feeding and in hygiene, and who often actually perform the duties of nurses where infants are sick and require their expert attention. In 1911 nearly 95,000 such visits were made to the tenements. That mothers learn much in such an educational campaign it is needless to say, and as a result we find infant mortality in recent years on the decline in New York City, and wherever advances are made in the care of infants and in the bettering of their environment.

For the last several years New York has conducted a campaign against infant morbidity and mortality through the establishment of milk stations. In 1911 75,000 quarts of milk were distributed every week, and with the milk went instruction to the mothers in the care of the milk, in the proper feeding of it, in the importance of breast-feeding where this was possible. The visiting nurse became a blessing to hundreds of homes of the poor, for she became an instructor no less than a helper. As a result of this crusade the death rate was reduced 17.7 per thousand among infants.

Already has much been done in other directions to promote the health, the physical development, the progress upward of the young among us. If the foolish people would only permit us, we could by vaccination drive small-pox from the face of the earth. But ever distrustful of our profes-

sion, and slow to perceive what is to their own best interest, there will always be found purblind people to oppose this beneficent measure, and thus postpone the day of total delivery. We can stay that dread destroyer of children, diphtheria, by the prompt use of antitoxin; and yet not a few people, including some of our own profession, still throw doubt upon the power of this measure. We can put an end to *ophthalmia neonatorum* by the universal use of silver nitrate solution in the eyes of every new-born child, thus cutting out at least 25% of the blindness of the world. After Crede's method of using a 2% solution of this drug was enforced in the Leipzic Clinic, the percentage of cases of infantile ophthalmia declined from about 11 to one-half of one per cent. in seven years. Experience has shown that a one per cent. solution is quite as efficient as the stronger solution, and no eye irritation follows its use, as it not unfrequently does after the use of the 2 per cent. strength. The use of the other silver preparations has not yet proven so certain in results. Why seek a better remedy than the nitrate, which brings decided benefit so surely and cheaply? Over one-third of the patients admitted to the Pennsylvania School for the Blind in seven years were made blind by this form of eye disease. In one New York School for the Blind the average annual cost per pupil is $400.00. Thus every State no doubt pays annually many thousands of dollars for the maintenance of patients needlessly deprived of their sight by the neglect of the doctor or the ignorance of the mother or nurse. Here is room for an educational movement that will richly pay. Why need we mention the awful misfortune of the child that is compelled to grope in utter darkness through an unfriendly world! Great is our responsibility and inexcusable our neglect of this simple measure of prevention, or of prompt treatment should ophthalmia of the new-born set in. Not every State, we fear, has adequate laws touching this most destructive disease.

It has recently been shown in congressional debate, that the National government ment is annually expending nearly $1,700,000 in the Bureau of Animal Industries, and over $2,000,000 in the Bureau of Plant Industry, all this mighty sum in the protection and improvement of animal and plant life. And yet there was objection to Senator Borah's bill for the establishment of a Children's Bureau whose estimated cost was but $30,000 annually. The purpose of this bureau as set forth in the bill, which fortunately is now a law, is "to investigate and report * * * upon all matters pertaining to the welfare of children and child life among all classes of our people, and it shall especially investigate the questions of infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, legislation affecting children in the several States and territories." The bill was promptly signed by the President, who appointed as Chief of the Bureau Miss Lathrop of Chicago, who has had large experience in the study of child life, and who gives promise of administering the new Bureau in such a way as to bring to childhood the greatest blessings.

Then we have medical inspection of school children, so auspiciously inaugurated in this city and other places, and soon to be introduced generally throughout our State, as it has been in a number of other States for some years. This is certain to result in the discovery of many defects and diseases which will be remedied by being referred to the family physician for correction. Many pupils pass as mentally dull because of defective sight or hearing, or a physical condition below the normal. Too young and ignorant to discover what is wrong, such children grope along, struggling through their daily tasks severely handicapped, and meeting with frequent punishment. Dr. W. A. White of the Government Asylum at Washington, says that many apparently mentally defective children are so only because of removable physical defects. "Here is a boy," he says, "who is apparently mentally defective; all he needs is an adenoid operation. Here is another who is tremendously irritable, and really it would seem as if he might be a murderer when grown up. The whole difficulty is myopia, which is easily correctable. * * * Here is a defective girl four or five years behind psychologically. There is a girl who will become a prostitute or criminal or both. Now is the time to tackle the problem of whether she will or not." The doctor truly

remarks that we have been too long in dealing with the finished product in trying to solve the problem of criminality and prostitution, and long experience shows the futility of this plan. The true remedy consists in dealing with the child, and striving to remove all of its defects. To indicate the extent of these defects I quote from a recent Journal some facts from foreign observations, as well as some in this country:

"Dr. Hall in Leeds found half the children in a slum school suffering from rickets. In the Edinburgh schools 40 per cent. had diseases of the ear. The British Dental Association, examining 10,500 school children, found only 1,508 sets of teeth, or 14 per cent., free from decay. In the Dundee schools half those examined had defective vision. The superintendent of schools in Alameda, Cal., says that out of 3,600 pupils "more than three hundred are afflicted with physical defects observable even the the layman." The Bureau of Municipal Research, reporting for this country, says: 'In rural as well as in city schools nearly one in three will have trouble with the eyes; nearly one in five will be mouth-breathers, because of too large tonsils or adenoid growths; every now and then there is one with nervous trouble or St. Vitus' dance, and certainly more than one in every school who is obviously predisposed to tuberculosis.'"

Physical examination for non-contagious defects in an eastern city:

	1909	1910	1911
Number examined	231,081	266,426	230,243
Number needing treatment	74.4%	73.8%	72.2%
Number found with defects other than teeth	44.2%	38.1%	32.9%
Number with defective sight	13.1%	11.1%	10.6%
Number with defective hearing	1.0%	.5%	.6%
Number with defective nasal breathing	18.7%	15.3%	11.8%
Number with enlarged tonsils	22.0%	18.7%	15.0%
In addition were found cases with lung, heart and other diseases.			
Number reported treated	83.0%	64.0%	86.0%

Such reports as these certainly indicate that the harvest is ripe for the reaper, and what a rich harvest it is to be in happier, more useful, and more contented lives, in a better and more productive citizenship.

We hear much of the influence of heredity, and all must admit that this is powerful. Unfortunately we can have but a limited influence in overcoming this influence until the science of eugenics has made greater progress. A number of States have introduced sterilization, a measure intended to limit the propagation of criminals and defectives. A bill with this purpose was introduced into our own legislature at the last session, but failed of passage, by reason, we are informed, of objection by an Ohio County representative. Not all men agree as to the wisdom of this measure, but at least nine legislative bodies have thus far been convinced of the wisdom of the law. Certain is it that we should exert every possible effort to lessen the production of children of criminal and defective stock. To quote a distinguished physician and author: "We go on marrying and giving in marriage criminals, lunatics, epileptics, inebriates and syphilitics, and breeding more of their kind. We go on hanging and jailing criminals, and ignoring the children from whom the criminals are made. We go on paying out for the cure of crime and its evil congeners more money than we spend for our children's education. We go on with maudlin sentiment and savagely oppose practicality and common sense in matrimony—society's very corner stone! And we pretend to be an intelligent social system." (Lydston.) Since young people will rush with little thought into marriage with the diseased, the degenerate, the physically and morally unfit, is it not time that the State shall at least make some effort in the direction of the prevention of the wholesale propagation of criminals, defectives, and paupers, with their consequent mountain of taxation? Says *The American Practitioner*.

There are about half a million insane and epileptic, feeble-minded, blind and deaf; there are 80,000 prisoners and 100,000 paupers—all of whom cost the United States over a hundred million dollars a year.

When young people marry in cities, especially in America, there may be almost no knowledge of the other's ancestry, even of their immediate family. But the young man or woman of today has the right to know the ancestry of both his or her child's parents. Each has a right to exact a health standard as well as a moral one. It would be a great help if family genealogies were kept, showing what each individual died of and from what diseases he had suffered.

If our best efforts in the production of a better race of children shall fail, and eugenics remain a science of the future, we may at least seek to cultivate the still newer science of euthenics, which aims to improve the existing generation by bringing about a

better environment, which is even more powerful in shaping the lives of children than is heredity itself. Efforts at changing the environment of poor children in the cities have been made for years, and in not a few instances young people taken from surroundings of the vilest character have developed into the highest type of citizens. One such child has reached a gubernatorial chair in a Western State, and many others have attained to places of respectability and great influence.

But as good as have been the results where children have been taken from bad homes and transported to some good home, perhaps in a distant part of the country, this is practicable in but a limited number of cases. In many other cases the Associated Charities steps in with its beneficent aid in endeavors to improve the home environment. It is but the limited few children compelled to go to a public institution of a reformatory character who come out greatly improved in morals, at least. If by the aid of this Charity the home can be made more cleanly, more free from disease, less immoral and debasing, then a good work has been done, for all must recognize that however humble, there is no place like home. As our own Secretary Sinks remarks in one of his reports, "no one hesitates longer than the social worker to separate the child from the home, and it is only when all hope that conditions may be improved is given up, and when it is evident that the child's vital interests demand it, that sanction for a separation from the home is given."

In this connection we may, I think, congratulate ourselves on the adoption of the prohibition amendment to our State Constitution by an overwhelming vote, since we can at least hope that fewer of our children will hereafter be tempted by the wide-open saloon with its brilliant lights and other attractions. And let us hope also that even the parents will be led to keep away from the vile stuff that has so blighting an effect on the home and such a degenerating result to the progeny. Prof. Alfred Gordon of Philadelphia has recently reported the results of an investigation made by himself on the effects on the progeny of alcoholism of the parents. He studied 298 cases of mental deficiency in 117 families. I give his conclusion only:

"Confining myself to the chief subject of my investigation, viz., mental deficiency produced by parental alcoholism, I am led to conclude from this painstaking study, carried on during a period of eight years, that alcoholism is unquestionably one of the direct causes of imbecility, idiocy, and feeble-mindedness in the offspring. The pictures built up from the collected facts show that alcoholized individuals procreate degenerate and mentally feeble children. These in their turn, if permitted, continue the chain of the pathological condition, and so on endlessly unless the chain is interrupted. One such family, for example, is capable of throwing into the community dozens of useless or dangerous individuals, who, if capable of multiplying, will produce their like."

A good word may be spoken here for the city playground, which under proper management may be made a force of value for the uplift of the child. Dr. Cope has wisely remarked, that if the State would give the same care to the physical development and education of the child that it does to the mind, thousands of children dying from preventable disease would be saved. Greater progress would be made in intellectual work, and a higher type of citizenship would be developed. From an economic standpoint such a plan would be a success because the State spends more money to educate children who die before they reach maturity than it would cost to put this idea of physical direction and education into effect.

Another movement that has not yet made as great advance as it deserves is the establishment of special schools for defective children. In a number of Eastern cities special rooms for backward children have been in successful operation for some years; but in Europe have been established schools for those who are physically defective. The kind of charity that helps a crippled child to help itself is certainly superior to that charity which makes permanent provision for the helpless. "In Europe those who have become disabled by accidents are taught how to support themselves, and thus they become more self-respecting, and at the same time lift a burden from the State. The trades of bookbinding, card-board work, brush making, tailoring, saddlery, shoemaking, etc., are taught; also bookkeeping, stenography, drawing, and manual work." Denmark, France, Germany and

other countries are ahead of our own land in these schools.

The proficiency attained by those who are seemingly crippled beyond any possibility of becoming self-supporting is said to be marvelous, as for instance a man whose hands have been amputated can make brushes almost as well as any workman can.

In twenty-five years 6,000 cripples of every age were cared for in Denmark, which is an indication of the need of such institutions everywhere.

In Chicago considerable attention has been paid to the general education of "subnormal" children in the public schools and the State has made provision for paying the extra cost of the education of deaf, blind and crippled children. There are 243 deaf, 38 blind, and 155 crippled children in their public schools, but it does not appear that the latter class is getting the industrial education that seems so desirable.

Another movement in the direction of child welfare is the establishment of outdoor schools for the physically defective, especially for the victims of tuberculosis or those predisposed to it. In such schools the children are not only taught the benefits of fresh air and outdoor life, but also the meaning of cleanliness. The pupils are made to wash and brush their teeth before and after meals. Personal cleanliness and correct habits are also taught. Stated physical examinations are made and recorded, and it is shown that the general health of the children is much improved, coughs and colds are rare, and the endurance of the pupils is greatly increased. The result obtained, both in physical improvement and mental alertness has been marked. Dr. Placek, Medical Inspector in Cleveland, says that the points to which special attention should be called are the improvement in the general health of the children, the great advance in scholarship as compared with that made by the same children when in the public schools, and the remarkable freedom of these children from attacks of coryza, tonsilitis, and bronchitis, as compared with those in the regular schools. Mrs. Walker, Principal of one outdoor school, says, that with every pound of firm flesh which has been added to the physical body came a decided change for the better in disposition, accompanied with increased mental vigor. She says the children have grown positively cheerful, and that mental tasks have ceased to be a hardship, a number of the children being further advanced than are the normal children from whose classes they were taken. Thus has been introduced "the small end of the wedge, which must and will be driven home, and when it is, we will look back with regret at the tardiness of its accomplishment, and into the future with hopes realized of a strong, sturdy, healthy and disease-resisting human race."

I have by no means touched all the measures that are in operation today for the benefit of the child, for time is limited. Let us remember, in the language of a resolution adopted by the last meeting of the International Conservation Congress: "Childhood is our greatest resource, and its right to protection in growing to a normal maturity is inalienable." The aim of all our efforts, then, should be "to secure for our children the fullest opportunity for personal development, to surround them with influences that will tend to develop them into vigorous, responsible, intelligent and upright American citizens, who will strive after and endeavor to realize the ideal set by the late Justice Brewer when he said, "Picture the glory of the Republic, if in each individual life were fully disclosed respect for law, taste for justice, regard of the rights of others, remembrance of the poor and afflicted, encouragement of education, the helping hand to everything that is true, beautiful and good."

I can not better close this hastily written remarks than by a quotation from a paper just received from A. L. Bowen, Executive Secretary State Charities Commission of Illinois. Addressing the medical society, he says:

"You are a center of information on questions of public health. You can and are daily disseminating knowledge on this subject. The relation of private and public health to mental defectiveness or mental breakdown is well understood by the profession, but not by the man and woman in the average walks of life. There is no one who can tell these people so well as you can what are the rules of good health, physical and mental hygiene and sanitary environment, and how necessary it is to observe them, and what violation or neglect of them entails. The relation between so many of the bodily ills and mental and nervous

disorders is so pronounced that physicians and laymen alike can not know too much about it.

The demand today is for child welfare. The hope of the student in mental and nervous diseases, with all their involvements of moral delinquency, racial degeneracy, public burden and the like, is the child.

And the salvation of the child depends upon home environment and school training, in both of which the physician in the community has a right to exert the great power of his influence and knowledge.

Unclean physical environment is the soil of unclean moral health. Unclean physical and moral health for the child means an enfeebled adult mind and body. It germinates the unclean mind, and the unclean act follows from which to the moral obliquy which produces the degenerate, the delinquent and the criminal, or what is equally as bad, the feeble-minded youth or the insane adult, there is only one short step. In either case the child has become a menace to society or a charge upon the State."

A STUDY IN DIAGNOSIS IN CHILDREN

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The diseases of childhood are both interesting and of vital importance to the general practitioner, and I thought a few case histories of the more or less common diseases of childhood might be of interest. These histories are made up partly from cases in my own experience, and partly from the experience of others. I have selected the more acute diseases, enumerating the bed-side findings, drawing conclusions, and giving diagnosis, with treatment.

CASE 1. Ralph C., two years old, had always been well except for an occasional attack of acute gastric or intestinal indigestion. He had had nothing unusual for supper, but had eaten a good deal hurriedly, and had been a good deal excited after supper. He began to vomit and to be feverish about midnight. The vomitus consisted first of his supper and then of water and mucus. He had apparently had no pain, and had been clear mentally. The bowels had not moved. He had no cough. He was seen at 5 a. m.

On examination, he was well developed and nourished, but a little pale. He vomited twice during the examination. He was perfectly clear mentally. There was no motion of the *alae nasi* and the respiration was quiet. There was no rigidity of the neck. The pupils were equal and reacted to light. The tongue was moist, moderately coated and not reddened. The throat was normal. The heart and lungs were normal. The abdomen was a little sunken and lax. There was no tenderness, muscular spasm, tumor or dullness. The liver was just palpable, the spleen was not. The extremities were normal. There was no spasm or paralysis. The knee jerks were equal and normal; Kernig's sign and the neck sign were absent. There was no rash. The *membranae tympanorum* were normal. The rectal temperature was 103.5° F, the pulse 130, the respiration 30.

The sudden appearance of vomiting and fever is consistent at this age with the onset of almost any acute disease, and it is often impossible as early as this to make a positive diagnosis. Certain diseases are more probable, however, than others. These are, in the first place, acute gastric indigestion, pneumonia, and scarlet fever; in the second place, tonsilitis, influenza, otitis media, and meningitis, especially of the cerebro-spinal form.

The normal ear drums rule out otitis media; the absence of reddening of the throat and enlargement of the tonsils, tonsilitis. Meningitis, beginning with such acute symptoms as in this instance, would almost certainly have shown by this time some signs of meningeal irritation, none of which are present.

The relatively slow rate of the respiration in comparison with the pulse practically rules out pneumonia. The absence of cough, of motion of the alae nasi, and of physical signs in the lungs, together with the quiet respiration, are also against it, but not nearly as important as the relatively low rate of the respiration. The absence of inflammation of the throat and enlargement of the papillae of the tongue is againt scarlet fever, but does not rule it out, as they might not have developed at this time. The rash would not, of course, have appeared thus early. Scarlet fever is, therefore, a possibility. Influenza is always a possibility with this history, as its manifestations are so manifold. The abdominal type is, however, much less common at this age than the respiratory type. The history of attacks of acute gastric indigestion in the past, the hurried and hearty supper with the subsequent excitement, the absence of the signs characteristic of other diseases, and the fact that acute gastric indigestion is very common while other conditions to be considered are relatively rare, make the diagnosis of

acute gastric indigestion altogether the most probable. The final diagnosis is, therefore, *acute gastric indigestion,* with the bare possibility that it may be scarlet fever or influenza. Twenty-four, or at most forty-eight hours, will settle the diagnosis positively, either by the cessation of the symptoms or the development of something more definite.

The prognosis as to life is, of course, absolutely good. The vomiting will probably cease during the day. The patient will, however, probably have further attacks unless his diet and regimen are very carefully regulated.

The treatment should be on the basis of the diagnosis of acute gastric indigestion. It will do no harm if the true diagnosis proves to be scarlet fever or influenza. The first thing to do is to cleanse the stomach. The quickest and most effective way to do this is to wash it out. This is a very simple operation in a child of this age.

A soft rubber catheter, No. 16 American is used. It should be passed through the mouth, and the stomach washed with plain water, or a weak solution of bicarbonate of soda, until the wash water runs clear. The stomach may also be cleansed, but less quickly and effectually, by giving copious drinks of water, which will probably be immediately vomited. Food should be entirely withheld for from eight to twelve hours. Whey or broth, in one or two ounce doses, every one or two hours, may then be given.

A solution of bicarbonate of soda, one-half teaspoonful to a glass of water, given in teaspoonful doses every fifteen to thirty minutes, will probably help to quiet the stomach. After the stomach has been cleansed and rested for an hour or two, a dessertspoonful of castor oil should be given. This may be vomited, but will probably be retained. If it is vomited, one-half teaspoonful doses of milk of magnesia, given at hour intervals, until three teaspoonfuls have been given, will probably be retained.

Sponge baths of 95% alcohol and water, equal parts, at 90° F., will reduce the fever and make the child more comfortable.

CASE 2. Mary D., five and one-half months old, had always been a perfectly well, breast-fed baby. About 6 a. m., September 6th, she suddenly began to cry and to put her hands on her abdomen. The crying continued for half an hour or more. At about this time she had three movements consisting almost entirely of bright blood. After this she vomited two or three times. The character of the *vomitus* was not noticed.

Judging from the story, she evidently was somewhat collapsed for a short time after the onset of the pain. She was seen about 7:30 by her physician, who examined the abdomen, but found nothing abnormal. He did not consider the condition an important one, although he watched the case very carefully afterward. She continued to have seven or eight small movements daily, which consisted entirely of mucus and blood. The amount of blood, however, had steadly diminished. The movement contained no fecal matter.

A bismuth mixture, which was ordered at the first visit, was vomited. There was no more vomiting until the noon of the 8th, since when she had vomited almost constantly. She continued to take the breast well. She had had no very sharp attacks of pain, but slept very little, moaning most of the time. She did not seem very sick until the 8th, and had noticed things and played a little that afternoon. The temperature had been taken morning and evening, but had never been over 100° F.

The mother thought that she felt a lump in the abdomen the evening of thhe 7th, but both the mother and the doctor failed to find it the next morning. She was given two teaspoonfuls of castor oil in the morning of the 8th, which were vomited, and also several large injections of salt and water, which brought away nothing but mucus and blood. She was seen in consultation at 9 p. m. September 8th, sixty-three hours after the onset.

On examination she was well developed and nourished. There was slight pallor. Her face was drawn and anxious. She noticed a little. The fontanelle was nearly level. The tongue was slightly dry, but not coated. The heart and lungs showed nothing abnormal. The liver was palpable below the costal border in the nipple line. The spleen was not palpable. The level of the abdomen was somewhat below that of the thorax. An indefinite resistance was felt in the left lower quadrant. There was no muscular spasm, but a little tenderness in this region. The rest of the abdomen was negative.

Rectal exaination showed more resistance in the left half of the abdomen than in the right, but nothing at all definite. The extremities showed nothing abnormal. There was no enlargement of the *peripheral lymph nodes.* The rectal temperature was 100.4° F, the pulse 180.

The diagnosis of intussusception is so plain in this instance that it is hard to understand how it could have been mistaken for infectious diarrheá, as was done. The sudden onset of severe abdominal pain with partial collapse, the vomiting, and the passage of bright blood are pathognomonic

of intussusception and entirely different from the slow onset of infectious diarrhea. The further course of the disease, with continued abdominal pain and numerous stools of mucus and blood without fecal matter, is most characteristic.

Pain is uncommon, except at the time of defecation, in infectious diarrhea at this age, and some of the movements always contain fecal matter. The physician was undoubtedly misled by the fact that the baby nursed well and did not appear very ill. It is, however, not at all uncommon for babies with intussusception to take their food well almost to the end, and the general condition is often not much affected during the first thirty-six hours or so. The physician was also probably further misled by the moderate temperature. This, again, is characteristic of intussusception, high fever being very unusual. He should have paid more attention to the mother's story of a lump in the abdomen and not have trusted so much to his own negative examination, for it often happens that the tumor can be felt at one time and not at another. The failure to obtain fecal matter from the injections should have also suggested intussusception. The castor oil was, of course, very bad treatment. If it had been retained, it would have merely made the intussusception tighter.

The physical examination, as often happens in intussusception, aids but little in the diagnosis. The strained and anxious face is suggestive of intussusception, but not inconsistent with infectious diarrhea. The indefinite resistance and slight tenderness in the left lower quadrant and the increased resistance in the left half of the abdomen on rectal examination, are corroborative of the diagnosis of intussusception, but without the history would not be of much importance.

The prognosis is very grave. It is almost certain that during the sixty-three hours since the onset adhesions have formed so that the intussusception cannot be reduced.

The circulation has been interfered with so long that the gut is almost certainly gangrenous. A resection will undoubtedly have to be done. There is not one chance in ten for recovery.

The only possible treatment is immediate operation. The case was operated upon but the patient died.

CASE 3. Ethel H., four years old, was the extremely nervous child of nervous parents. She had always been well except for measles and chicken-pox. She vomited a little the morning of August 6th, but seemed well in every way the next day. The following day, which was extremely hot, she ate a considerable amount of ice cream. She slept fairly well that night, but on the morning of the 9th, vomited once and began to complain of pain about the navel. A physician who was called found the temperature 102° F. The respiration was rapid, but the lungs were normal. He gave two teaspoonfuls of castor oil and stopped all food. The child, after this dose, had three or four loose, foul movements which contained a little mucus, but no blood. The abdominal pain continued and was very severe. The temperature the morning of the 10th was 103.5° F. The bowels moved three times during that day, the movements being of the same character. The abdominal pain continued. The evening temperature was 101° F. The pulse ranged between 145 and 150, and the respiration between 40 and 80. There was no cough and the lungs remained normal. She vomited several times that night and, on account of the severe pain in the abdomen, slept very little.

The temperature by rectum the morning of the 11th was 99.6° F, the pulse 140. She took no food, but drank considerable water. She vomited several times that forning. She had had a little brandy, some bismuth and chalk mixture, and two doses of Castoria.

She was very restless, and complained constantly of pain in the abdomen. The abdomen was distended and tender from the first, the physician thought less so that morning. The physician had felt the pain was exaggerated because of the nervous temperament of the child. She was seen at noon August 11th.

On examination, she was well developed and fairly nourished. There was moderate pallor. She was very restless, tossing from side to side, and constantly crying out from pain in the abdomen. She lay on her back with the legs flexed on the abdomen; extending them caused pain. Her face looked pinched. The tongue was dry, but not coated. The heart and lungs were normal

The abdomen was only moderately enlarged, but very tense. No localized spasm could be made out. She complained whenever the abdomen was touched, but no more so on deep than on light pressure. There was no localized tenderness There were no signs of fluid in the abdomen. The liver and spleen were not palpable.

Rectal examination showed nothing abnormal, but caused much pain. The extremities were normal. There was no spasm or paralysis. The knee jerks and Kernig's sign could not be obtained because of the child's resistance. The rectal temperature was 101° F; the pulse 156 A movement, passed during the examination, consisted of a few small masses of brownish mucus.

Pneumonia is suggested by the sudden onset and the comparatively greater rise in the rate of the respiration over that of the pulse. The location of the pain in the abdomen is not against pneumonia, because the pain in pneumonia in childhood is often localized in the abdomen. The abdomen is also often tense in the early stages of pneumonia in childhood.

The drop in the temperature without a corresponding diminution in the rate of the respiration, the absence of cough, grunting respiration, and movement of the alae nasi, the absence of physical signs in the lungs, and the pinched face are together sufficient to exclude pneumonia.

The free movements of the bowels are sufficient to rule out intestinal obstruction.

The diagnosis lies, therefore, between intestinal toxemia and appendicitis. The history of eating ice cream on a hot day is suggestive of intestinal toxemia, but is not inconsistent with appendicitis. The continuance of the symptoms in spite of catharsis and starvation is against toxemia, but does not exclude it. The character of the stools is much against toxemia. The vomiting is consistent with either condition and hence is of no importance in the differential diagnosis. Distention of the abdomen is, however, unusual in toxemia, and tenderness and pain extremely rare. These two points are sufficient in themselves to turn the scale in favor of appendicitis. The general abdominal distention accounts for the lack of localized spasm and tenderness, and suggests a beginning or developing general peritonitis.

The drop in the temperature with no improvement in the other symptoms is strong evidence that perforation has occurred and peritonitis begun. The diagnosis is, therefore, appendicitis, with probable perforation and beginning peritonitis.

An examination of the blood was not made in this instance and would not have helped, because a high white count is consistent with either condition. Moreover, a low white count is consistent with either depression after perforation or intense toxemia.

The prognosis in this instance is practically hopeless. The only chance lies in immediate operation. The patient was operated upon but died.

CASE 4. George W., twelve years old, was the child of healthy parents. An uncle had died of pulmonary tuberculosis a year before. The boy had not lived with him, but had seen him repeatedly. He had always been well, except for an illness "similar to the present" a year before. He began to be dizzy about August 26, but had no other symptoms except constipation. He was first seen by his physician September 2. The physical examination and the urine then showed nothing abnormal. His bowels were thoroughly cleaned out, but the dizziness persisted. September 6th he began to complain of stiffness in the neck and held his head turned to the right.

Passive motions were, however, but little limited and did not cause pain. The pupils were equal and reacted to light. The knee jerks were equal and normal. Kernig's and Babinski's signs were absent. The neck was stiffer September 8th and he began to complain of pain in the neck. The pulse also became slow, running between 56 and 64. Patient began to vomit on the 9th and the rigidity and pain in the neck became much worse. The highest temperature up to the morning of the 9th was 99° F; that morning it was 100° F. The constipation had persisted. He was seen at 4 p. m., September 9th.

He was well developed and nourished and of good color. He was perfectly conscious, but cried out occasionally from pain in the back of the neck. There was no retraction of the neck, but he held his head rigidly and turned to the right. All motions of the neck caused much pain. The neck sign could not be tested because of the rigidity. There was no enlargement of the *cervical lymph nodes*. The tongue was moderately coated; the throat normal. The pupils were equal and reacted both to light and accommodation. There was no *strabismus*. The *membranae tympanorum* showed nothing abnormal. The heart and lungs were normal. The liver and spleen were not palpable. The abdomen was sunken but not rigid. There was no spasm or paralysis of the extremities. The knee jerks were equal and not exaggerated. The cremasteric and abdominal reflexes were present and not unusually lively. There was a marked Kernig's sign on both sides. Babinski's sign was absent and there was no clonus. There was no disturbance of sensation. There was no eruption. The mouth temperature was 100° F, pulse 60.

There can be no doubt, of course, that the patient has meningitis. The only question is whether it is tubercular or cerebro-spinal. The known exposure to tuberculosis and the slow onset point strongly toward the tubercular form. There is nothing in the physical examination which is not consistent with either type. The absence of eruptions does not count at all against cerebrospinal meningitis, since eruptions are far more absent than present in this disease in childhood. It is worthy of mention that the abdomen, while often

sunken from the lack of food, is almost never rigid in meningitis. In spite of the fact that the disease is almost certainly tubercular, a lumbar puncture should be done to make the diagnosis certain, because the fact that he has been exposed to tuberculosis does not prove that he has contracted it, and because the onset of cerebrospinal meningitis is sometimes slow, and, if it is cerebrospinal meningitis, the serum treatment may save him.

A lumbar puncture was done at once and 45 ccm. of very turbid fluid under moderate pressure was allowed to run out. The marked turbidity of the fluid points very strongly to cerebrospinal meningitis, and much overbalances the points previously mentioned in favor of tubercular meningitis. It justifies a probable diagnosis of cerebrospinal meningitis, and makes it obligatory to treat him on this basis without waiting for the results of the examination of the fluid.

He should be given 45 ccm. of antimeningitis serum, which is equal to the amount of fluid withdrawn—through the same needle without withdrawing it. It is unwise to wait for the examination of the fluid, because the symptoms are marked and the earlier the serum is given the more likely he is to recover. The serum can do no harm if the disease proves to be tubercular, and, if it is cerebrospinal considerable time is saved by not waiting for the examination. If the examination of the cerebrospinal fluid shows that the trouble is really cerebrospinal meningitis, this or a larger does according to the amount of fluid which escapes, must be repeated daily until no micro-organisms can be found in smears made from the fluid. If the temperature remains much elevated or the symptoms are not improving, the serum treatment must be continued even if the organisms have disappeared.

Rigidity of the neck alone is, however, not an indication for the continuance of the treatment, since rigidity not infrequently persists well into convalescence. The withdrawal of the fluid will probably relieve the headache. If it does not, an ice cap will probably help it.

The fluid which was withdrawn showed a small deposit of pus and fibrin clot. Ninety-nine per cent of the cells were polynuclear and the diplococcus intracellularis was found both within and without the cells, thus verifying the diagnosis of cerebrospinal meningitis.

The prognosis in this instance is somewhat against recovery, because of the long duration of the illness before the beginning of treatment. The slow onset and the low temperature are, however, points in his favor.

THE DIAGNOSIS OF THORACIC GLAND TUBERCULOSIS DURING CHILDHOOD

J. C. Abbott, M.D., Piedmont, W. Va.

(Read before Grant H. H. M. Medical Society.)

In the work of exterminating tuberculosis, the two most successful lines of attack are evidently the prevention of transmission and the earliest possible diagnosis of infection. The fact that early diagnosis usually means favorable prognosis, has resulted in the promulgation of many signs of incipient tuberculosis of widely varying degrees of reliability. The fundamental source of error and confusion in this matter is the failure to recognize the fact that aside from biochemical reaction and the finding of true tubercle bacilli, we have no positive sign of tuberculosis. The physical signs which we find in all stages of tuberculosis are signs of tissue changes, which clinical experience has shown to be due in most cases to tuberculous infection. Nevertheless, the larger our clinical experience, the more fully we realize that these same tissue changes are at times produced in other ways. As a general rule the slighter the changes upon which the diagnosis is based, the greater the liability of error. On the other hand, some of the so-called signs of incipient tuberculosis are really signs of the first or even the second stage of infection; as for example, skin atrophy and increased surface temperature over the infected area. As a result of this confusion we find two opposing opinions among general practitioners. Some seriously doubt the sincerity of all early diagnosis, while others, with more enthusiasm than rationality, do not hesitate to make a positive diagnosis after the most casual office examina-

tion. It is this latter class that has incited caustic criticism by several pediatrists.

Nearly all observers now believe that the majority of tuberculous infections occur during infancy and childhood, and that in practically all cases of pulmonary infection in early years, there has existed a prepulmonary stage of infection of the thoracic glands. If, therefore, it is possible to recognize this prepulmonary stage, it is of the utmost importance to do so.

We have two classes of diagnostic signs to be considered: the biochemical and the clinical. The biochemical tests are the tuberculin reactions, perhaps some form of the opsonic test, and the complement fixation. The recent work of W. J. Butler indicates that we may soon have a fairly accurate test for active tuberculosis in some form of complement fixation. As yet the real value of the tuberculin test has been overlooked.

There is a great tendency in the profession to believe that most of us are tubercular anyway, and that there is no practical use in individualizing the diagnosis. As a matter of fact, the Von Pirquet test will be of great value as soon as it is widely applied for a proper purpose, that is, to determine when the individual passes from a positive to a negative phase. This, of course, applies principally to children.

There is no reason why the test should not be applied to all children at brief intervals, in order that they may receive proper hygienic attention at the earliest possible stage of infection.

It might be argued that all children should receive the necessary hygienic attention regardless of infection, but, in the present state of human nature some definite indication is needed to secure for the individual these special efforts. This is exemplified in the attitude of many parents toward open-air schools. Although they are aware that outdoor treatment is the universally accepted method for tuberculosis, they still fear that their non-tubercular children will catch cold if exposed in this manner. It is perhaps the recognition of these facts that some physicians would give as an excuse for their reckless diagnosis of incipient tuberculosis.

Incipient pulmonary tuberculosis is apparently a very elastic term, but it certainly is better than that one called "pre-tubercular stage." It should be used solely to designate a stage of infection earlier than the first stage, that is, the stage when the actual infection is still limited to the intrathoracic glands, with the beginning evidences of bronchial or pulmonary irritation. It is at this point in the progress of the disease that the clinical symptoms justify a suspicion of the nature of the infection, and it is, therefore, at this time that the special diagnostic signs described by various investigators should be most carefully looked into.

It is a fact that an accurate knowledge of the anatomy of the upper median part of a child's thoracic cavity is essential for an intelligent interpretation of physical signs, while it is a fact that there is still a great deal of confusion in regard to this matter, as the recent studies of Fetterholf and Gittings indicate that the old ideas derived from ordinary dissections are erroneous, and they have observed sources of error in the frozen-section method. The first point to be noticed in the cross section is, that the amount of space occupied by lung tissue is very slight at and above the level of the first dorsal vertebra, and below this point there is a rapid increase in the amount of lung exposed in cross section. The trachea lies almost in contact with the bodies of the vertebra above this point. Advancing age has something to do with the change in the relative levels. This accounts for the loud transmission of tracheal sounds along the mid-line of the cervical vertebrae and the abrupt termination of the sounds at this point in the normal individual.

Another point is that at this same level of the first dorsal vertebra, the right lung is larger than the left, and it lies in direct contact with the trachea. This accounts for the unusual loudness and harshness of the respiratory sounds in the region of the right clavicle in normal children, and is a condition that is likely to be misleading.

The relation of the right jugular vein to the tracheoesophageal glands indicates that the vessel might be compressed by enlargement of those glands, and it is also possible that the vena azygos major might be compressed by enlarged glands where it crosses the trachea.

At the level of the second dorsal vertebra the trachea has moved forward and is

in front of the esophagus; according to Chevalier Jackson, the esophagus is always collapsed, so that the trachea might be pressed back against the body of the vertebra by the enlargement of any tissues anterior in the median line. At the level of the third dorsal vertebra there is a decided change in relation of the tissues. Against the body of the vertebra lie the aorta on the left and the vena azygos major on the right. The esophagus is in front of these vessels in the median line and the bronchi are still further forward. The left bronchus is so close to the aorta that a moderate increase in antero-posterior pressure might cause a transmission of the bronchial breathing sounds to the back.

Clinical Findings—The examination of children proves that we do get decided variations from the normal auscultation and percussion sounds on the level of the first and second dorsal vertebræ, both anterior and posterior. The changes have been attributed by some to tubercular glands, while others think the thymus may be the cause of these variations. We might say that the thymus has received a great deal of attention during the past four or five years; its relation to stridor, asthma and sudden death is still in dispute. We do not, as yet, know the size of the normal thymus for any given age, and we do know the size varies greatly in different children, but the older the child the less probability is there of the existence of a large thymus. A number of years ago Eustace Smith stated that a venous hum heard over the upper part of the sternum when the head is forcibly extended is diagnostic of tuberculous enlargement of the glands in this region. It might be well said of Smith that he has been too accurate an observer to have his conclusions dismissed without the best of reasons. Yet I have observed this sign in children who were apparently normal, and I do not believe that it is always present in children with advanced tuberculosis of the tracheo-bronchial glands. It is possible that the shape of the chest has some bearing on the question, and it may be that the bruit is produced only if certain glands in direct relation to the right bronchus are involved and enlarged.

It is generally conceded that the chief signs of tuberculosis of these glands are found at the back, and the name of D'Espine has become associated with the subject, although he is only one of many who have made careful study along the same lines.

Normally, loud tracheal respiration is heard to the level of the seventh cervical vertebra, but not below. When it is heard over any of the dorsal vertebra, it is considered to be diagnostic of enlarged glands. This change might be found at times in children without any evidence of tuberculosis, but it is to my mind the most reliable auscultatory indication that we have.

The accurate interpretation of percussion sounds in the vertebral and paravertebral lines, requires not only a good ear but also a very acute control of the imagination. There are undoubted changes in advanced cases with pulmonary involvement, but no pulmonary consolidation. The difference in the shape of children's chests, and in the thickness of the chest wall, renders accurate conclusions very difficult. Tuberculin tests should be applied to all children for the purpose of differential diagnosis.

Nearly all children who develop pulmonary tuberculosis have passed through a period in which the thoracic glands alone were infected, and a diagnosis at this time would render possible the arrest of the disease in a large majority of cases.

Although the physical signs produced by enlargement of the intra-thoracic glands vary greatly in different individuals, and the same are at times found in apparently normal children, their presence in connection with the systemic indications of chronic malnutrition not only justifies but renders obligatory a tentative diagnosis of tuberculosis infection.

Relative to the tuberculin reaction, its use has greatly increased since the discovery of Von Pirquet, who found that individuals who had once suffered from tuberculous infection, or were at the time affected, would react locally to *old tuberculin* by the vaccination method, and it might be said that the skin reaction of Von Pirquet is a specific tuberculin reaction; but the tuberculous process may have healed out years before. As a consequence, this test may be of little value in diagnosing an active process, except during infancy, although a strong reaction at times may lend

additional weight in diagnosis. Bordet, in his studies of Pleiffer's pnenomenon, discovered a new principle in immunity, which is that of complement fixation. He was able to show, by an indirect method, in which a hemolytic serum was employed, the presence of complement binding antibodies. By means of this method he found that the blood of guinea pigs which had been immunized with killed tubercle bacilli contained an antibody that would unite with an emulsion of tubercle bacilli as antigen and complement.

HYPERTROPHIED TONSILS AND ADENOIDS

O. M. Brooks, M.D., Moorefield, W. Va.

(Read before Grant H. H. M. Medical Society.)

The subject I bring before you today is one which presents itself almost daily to the general practitioner. How very often do we hear the old, old story, "Doctor, I have tonsilitis several times every year," or "Doctor, my tonsils are down," "Doctor, my throat gets so dry, I cannot breathe through my nose well, or I catch cold so easily."

Of course there are many etiological factors embraced in the causes for these conditions, but my object today is to bring to your careful attention and consideration the fact that most of these conditions are brought about by hypertrophied tonsils and adenoid. (I speak in the singular, gentlemen, because there is only one adenoid.)

First. Let me go briefly into the anatomy of the tonsils. These are two small lymphoid structures held together by connective tissues and covered by stratified epithelium, located one on each side of the oro-pharynx. They are bounded anteriorly by the palato-glossus muscle surrounded by a reflected or divided fold of the soft palate. This forms the anterior pillar of the tonsil; posteriorly by the palato-pharyngeal muscle surrounded by a reflected fold of the soft palate, and this forms the posterior pillar of the tonsil. Externally they are separated from the ramus of the inferior maxilla and the blood vessels of the neck by fat and loose connective tissue.

Starting from the external surface and running towards the center are about ten or twenty small crypts or lacunae. In a normal tonsil (one which does not protrude beyond the pillar of the fauces), these are not very deep, but in a hypertrophied tonsil they may be one-half an inch deep.

Pathology. The pathological condition of hypertrophied tonsils and adenoid are so closely related that they usually go hand in hand. I shall, however, try to describe these separately and give the symptoms under one general heading.

The Adenoid. This is located usually upon the upper and posterior wall of the naso-pharynx. It is composed of lymphoid cells held together by connective tissue. This lymphoid tissue sometimes becomes sort of redundant or folded, forming small recesses in which is found degenerated lymphoid cells and bacteria forming a cheesy matter.

The Tonsils. A hypertrophied tonsil usually is composed of the same tissue that exists in a normal tonsil, that is, lymphoid and connective tissue. Where the hypertrophy has existed for some time the connective tissue usually predominates and the tonsil becomes more firm and dense. These tonsils are bright red or pink in color, irregular in shape and soft. The crypts are distended and partly or usually filled with a cheesy material made up of desquamated epithelial cells and leucocytes. In some varieties the amount of connective tissue is greatly increased and very dense. In these the tonsils are pale, round, firm and hard. Following successive attacks of acute tonsilitis adhesions sometimes form between the tonsils and anterior and posterior pillars of the fauces. If the mouths of lacunae become obstructed as the result of these adhesions, the ducts become distended with secretions, sometimes producing cysts within the tonsil. In rare instances the fluid constituents of these cysts becomes absorbed allowing the salts to remain, a hard, dense granular mass.

Symptoms of Both. To my mind, the most prominent symptom and the one which causes the most ill effects is mouth-breathing, with all its various manifestations. As we all know, the inspired air passing in through the nares is cleansed of dust, foreign matters, etc, by the small hairs in the alae nasi. The air is also warmed and be

comes moist by passing over the erectile tissue of the turbinated bones. If the inspired air is drawn in through the mouth, what are the results? The air absorbs the moisture from the various structures, producing a dry mouth, dry throat, pharynx, larynx and bronchial tubes. And what are the results of this? Snoring at night; catching cold easily; a predisposition to bronchial troubles; also to tuberculosis; frequent attacks of tonsilitis; inabilty to blow the nose; restless sleep; thick, husky voice; an irritable, hacking cough; hawking and trying to clear the throat. Furthermore, by drawing the air out of the Eustachian tubes there is allowed an unequal pressure of air upon the membranæ tympani, resulting in various forms of ear trouble. In addition to these symptoms caused by mouth-breathing the patient usually has a peculiar, dull, expressionless face; lips thick, swollen and everted; mouth open; pinched face; nasal twang to voice; mentality low, pigeon-chested; seldom robust; breath foul; disorders of digestion; complexion sallow; night cries; nocturnal enuresis; convulsions; chorea; nose bleed, etc.

Treatment. There is only one treatment and that is surgical. There are many ways and many methods of operating, but the way I believe most satisfactory and the way I have followed in the cases I have operated upon, has been the complete enucleation of the tonsil in its capsule. First, let me say this operation should be done only in a hospital under the best aseptic conditions possible, and the surgeon should be prepared in case of accident to do either a tracheotomy or ligate the carotid artery.

Preparation of Patient. The patient should be prepared just the same as is necessary for any other operation.

Anesthetic—Local. If the patient be an adult you can use a local anesthetic. I have seen quinine and urea used, but for some reason every case in which I saw it used became infected. The best local anesthetic is made by using 10 m. of a 4% cocaine, 10 m. of adrenalin, and 1 drachm of a normal salt solution; inject in the pillar of tonsil with a long tonsil syringe. In addition one can also use a small amount of powdered cocaine on a swab, if needed.

General. If the patient be an adult I still believe in giving a preliminary hypodermic injection of morphia, hyoscine and strychnia or morphia and atropine combined (notwithstanding a note in our Potomac Valley Medical Bulletin to the contrary). I have seen it used routinely in hundreds of cases, and have never yet seen any bad results from it. The anesthetic to be used should be ether.

Operation. In children under five years of age possibly the tonsilotomy is the better method and usually gives good results. Over this age the complete tonsilectomy should always be done. If a local anesthetic is used the patient can sit upright on a stool. If a general anesthetic is used the patient should be thoroughly asleep to prevent the reflex gagging. The surgeon stands on the patient's left side. The mouth gag is inserted. This should be a large one and one which fits evenly upon the front teeth. The throat is swabbed dry, and by the aid of the reflected light the tonsil [preferably the lower or left one, is taken first in order to keep a dry field] is grasped by a tonsil volsellum. This also acts as a tongue depresser. Traction is now made on the tonsil and if no adhesions are present or the tonsil is not a submerged one, it can be outlined. The knife, preferably a "Tiding knife," is now inserted over the apex of the tonsil between the capsule and the pillar, and by gentle traction is brought forward and downward, separating the capsule from the anterior pillar, then it turned backwards and the posterior capsule is separated from the posterior pillar. The "Tiding snare" is now slipped over the volsellum down over the apex of the tonsil to its base, which is cut through by the snare, when the tonsil is freed. A large dry sponge is immediately pressed into the open space and firm pressure made, which usually controls the hemorrhage. However, if this does not do so you can catch the bleeding point up with a haemostat and give it a slight twist. If this still does not stop the hemorrhage you can then ligate, using a small strand of No. 1 cat gut.

As soon as all hemorrhage from the raw surface of the enucleated tonsils ceases, the adenoid should be curetted away. For this the size of the curette used should suit the size of the patient. The curette should be placed in the mouth with the handle well up against the upper teeth, avoiding the uvula

until the cutting end passes the soft palate and uvula, when the handle should be lowered and the cutting end pulled well up against the choana, then shove the cutting end well back against the naso-pharynx and cut downward, giving your handle a sweep which will usually throw the adenoid well out into the mouth, where it can be grasped with a haemostat.

The patient should be put to bed and kept under observation for twenty-four hours. Give liquid diet and allow him to suck an orthoform lozenge every two hours. This acts as a slight sedative to the throat. When the patients are discharged they should be instructed to gargle their throats several times daily for a few days with a solution of one drachm of sodium chloride and one drachm of sodium bi-carbonate to one pint of boiled water. They should also be instructed to sleep in well ventilated rooms, breathe through their nose regularly, and to go their way and sin no more.

SYPHILIS IN CHILDREN

Charles O'Grady, B.Sc., M.D., Charleston, W. Va.

(Read at Annual Meeting of State Medical Association, July 1912.)

Syphilis in childhood often out herods Herod, in the loss of babies.

The cases of several miscarriages following each other can nearly always be proven to be caused by syphilis in the parents, and since the introduction of the Wassermann reaction we have to study the disease anew. The law of Colle that the mothers of children with congenital syphilis (infected by the father), are healthy or immune has been proven not true by Heyneman, who obtains a positive Wassermann reaction in forty-three mothers out of forty-seven, but was unable to demonstrate the spirochetæ in the blood except in one case. General workers in the laboratories have corroberated Heyneman and the general opinion is that Colle's law will have to be abolished. In like manner Profeta's law that the apparently healthy children of luetic mothers are not to be considered as luetic, but as immune against syphilis, will not stand much longer, as by far the majority of cases of such children showed a positive Wassermann reaction. No doubt further study will show that these laws are only apparent. It has always been known that a luetic infant would infect a wet nurse, and now they are testing the wet nurses to see that they give the Wassermann reaction negative a number of times before being sure that they are free. That syphilis destroys a large percentage of the offspring, a few figures from Kelly will tell.

Syphilis in the father causing fewer deaths and not continuing after three or four years. The mortality is given as twenty-eight per cent and the morbidity as thirty-seven per cent. While syphilis in the mother is far more fatal. The mortality in maternal transmission is given as sixty per cent, and the morbidity as eighty four per cent. It is also much more prolonged in the mother, the duration being given as five or six years. In mixed transmission where both parents are syphilitic there are very few infants escape, and posterity in these families is almost extinguished in toto. The mortality is given as from sixty-eight per cent to eighty-six per cent, and some give even a higher per cent. Syphilis is such a protean disease that I intend to give only a few manifestations of the hereditary form, and a few lines on the treatment.

When the child is born apparently healthy, there is often an outbreak of the specific eruption within the second or third week or at least by end of the second month. It is generally characterized by bullous eruptions on the palms of the hands and the soles of the feet, the so-called syphilitic pemphigus. If the pemphigus is general it is not syphilitic, but a real pemphigus. But when confined to the palms and soles it is syphilitic. Another early sympton is the condition of the mucous membrane of the nose, the so-called syphilitic coryza or "snuffles." This is almost pathognomonic of syphilis and is frequently very troublesome, as there may be so much obstruction as to prevent the child from nursing. The skin lesions are not unlike those of the acquired form in adults. The lesions consist

of erythematons patches, papules pustules and tubercles. They include also fissures at the corners of the mouth and condylomatous patches about the genitals and anus, which are usually moist and humid. Lesions of the viscera are often found to exist with the lesions of the surface. Death usually occurs from failure of the gastrointestinal tract or malnutrition, marasmus or cachexia, so called by different syphilographers. The hereditary form has some lesions which are peculiar to it, lesions of the eye and of the ear, also lesions of the bones and of the teeth. The lesions of the eye, best known is the so-called keratitis, described by Hutchinson, which is an interstitial keratitis. The lesions of the ear are sometimes an otitis media with destruction of ossicles and sometimes mastoid disease, and again the development of deafness. The lesions of the bones are gummata of the cranial bones, destruction of the bones of the nose, which leaves the nose with a caved-in appearance. Dactylitis of the phalanges of the fingers and sometimes a true inflammation of the long bones, an osteoperiostitis or an osteomyelitis, or again only a gummatous deposit on the bones. Two more small lesions must not be left out, namely, onychia of the nails and the so-called Hutchinson teeth, because both lesions are pathognomonic of syphilis. Onychia is a true inflammation of the matrix of the nails. Hutchinson teeth were first described by Hutchinson and are the two central upper incisors, and they are said to be peg shaped, and have a crescentic notch in the cutting edge, and these deformed teeth are the permanent teeth and hence not found in young children. Hutchinson's triad has always been consider diagnostic of hereditary syphilis, namely, interstitial keratitis, affections of the internal ear, deafness or deaf mutism and the Hutchinson teeth. The treatment of syphilis has changed absolutely in the last two years and an entirely new drug in this affection, namely, arsenic, the Salvarsan of Erlich, has been proven an absolute cure in adults and no doubt it can be used in older children in small doses. It is, however, hard to administer and must be given intravenously to get the best results. But I wish to speak of sodium cacodylate, introduced by Dr. Murphy of Chicago. This drug is a very safe drug to use and I can do no better than quote the essential details from Dr. Murphy's article as given by Therapeutic Notes. "Administered in doses of ½ to 2 grains hypodermatically its action was prompt and efficacious in cases in which the usual remedies had utterly failed. Chancres became clear, ulcers without induration in 48 hours, mucous patches cleared up in twenty-four to forty-eight hours; ulcers of the palate and pharynx healed in three to six days. In a child nine months old ¼ grain injected into the pectoral muscle caused a papillary syphilide to disappear in forty-eight hours. Two 2-grain does, twenty-four hours apart, completely relieved the pain of a patient who suffered from active gastric crises (luetic,), which usually lasted three weeks. An advancing perforating ulcer of the palate, which has resisted injections of ¼ grains of mercuric bichloride daily, promptly yielded to sodium cacodylate, two injections of ¾ grains each. The ulcer was healed in six days. Dr. Murphy suggests that sodium cacodylate be employed in primary doses of 2 to 4 grains, depending on the size and strength of the patient, and not repeated within three or four days unless there are special indications for it." Of course this refers to adult patients. I believe that sodium cacodylate in from ¼ grain to ½ grain every two or three days hypodermatically will become a popular treatment for syphilis in children. In the old treatment with mercury and the iodides, I have always found calomel the best form of mercury as recommended by Jacobi, and the iodides I usually prescribe with some roborant tonic as the syrup of the iodide of iron.

THE STATE BOARD OF HEALTH AND PUBLIC SCHOOL SANITATION.

Luther S. Brock, M. D., Morgantown, W. Va.

Never before as now have school problems been so seriously considered. These problems have come to me as pupil, patron, and for nearly fifteen years as member of the local school board. Most of these have not been solved satisfactorily to myself nor, I dare say, to you. * * *

The relation of the State Board of Health to public school sanitary conditions is not alone theoretical, but should be, and is, broadly sympathetic and practical. Probably the best expression of this is to be found in the comparatively recent introduction of medical inspection, which naturally grows out of the recognition of the fact,—that if we would have sane minds and sound morals we must have healthy bodies. Medical inspection greatly adds to the efficiency of the public schools by discovering physical conditions which retard the normal growth and development of the pupils. The results may sometime be disappointing, but on the whole, medical inspection commends itself. I agree with Prof. Terman of Stanford University, that we may not hope to have the best results from this system until we shall have persons especially trained for the work—a work which presents so many problems requiring the greatest knowledge of conditions pertaining to the lives and habits of public school children—their home environment, school environment, food, clothing, recreation, etc. There is a crying need for such medical inspection as will take cognizance of all these conditions of school life.

If intelligent co-operation of teachers, parents and pupils could be secured, the efficiency of our public school system would be greatly helped. It is evident that a strong tendency prevails to overestimate the mental capacity and endurance of the growing child. There is too much forcing, too much cramming. The multiplication of studies, many of which are often beyond the child's mental grasp, and the long lessons assigned tend to atrophy rather than development of the brain cells. Is it any wonder that so many grow discouraged; and the things which we would have them like and enjoy, they learn to despise? Every child has a sovereign right to an unhampered and carefree period of development. Given the contrary, his growth is retarded and disease invited. Happiness belongs to childhood. Without happiness there cannot be beautiful, symmetrical development; without such development, a child's whole future is handicapped.

Modern methods tend too often to physical and mental dwarfage. We are not so much concerned about a few specimens of physical prowess, or even of intellectual prodigies, as we are that all the children shall have a chance for harmonious development on natural, wholesome lines. Thus will be fulfilled the spirit in which the public schools of the country were originally conceived.

The State Board of Health has for its object the conservation of the health of the people of the State. The purpose of the public schools is the nurture of the children of the State in all that pertains to their physical, mental and moral well-being. The relations of the State Board of Health and the public schools are, therefore, intimate and vital. The State is interested in having the highest ideals of citizenship. She must therefore begin with the children of the State. Prof. Terman says again:—"It seems pretty well acknowledged that the future will belong to the nation possessing the greatest number of strong, healthy and physically as well as mentally resistant individuals."

We are rearing a lot of badly developed, overwrought children. It cannot be otherwise, with the conditions which now obtain. The average child begins his school life at the age of six years, and thereafter, for ten or twelve years, stoops over a desk for five or six hours a day, six to nine months each year. Add to this the time given to study at home, and you have him leading a sedentary life. This is not the natural life of the child. As stated by Gulick: "So extensive a readjustment of the life habits of the young of a species has never before been attempted." The child grows and thrives by its restless activities—a sedentary, passive life is altogether foreign to it. Dr. Amos J. Givens says: "From six to fifteen is the age of development, in which the subsequent physical and mental welfare is largely determined. If only the intuitions of nature were respected during this period of growth and development, the problem would by no means be so serious. The youth who had been brought into possession of his full psycho-physical manhood, would be in a position to conserve this inheritance in the face of great odds. *This we do not permit.*" It is not surprising, therefore, that only a very small percentage of young men, eighteen to twenty

years of age, can pass the physical tests of the United States Army.

While decrying some of the false notions and practices of the public school system, I would not underestimate the work done by the great army of teachers with such painstaking and conscientious fidelity, or the benefits that come to the State. I would make the work of the teacher less irksome, and that of the pupils more attractive and profitable. My plea is for less stress and strain for the child, and I would make the same plea for the grown ups. I sometimes think that teachers, as well as the rest of us, take life too seriously. We permit the responsibilities of life to bear down on us too heavily, so as to destroy all resiliency of life and spirit. We know not the joy of living. We should not save all happiness for the hereafter. It is intended that we should be happy here, else God would not have made this world so full of beauty, poetry and song. Let us attune our lives to the harmonies of nature, and not dwell too long and too heavily on the discordant notes of life.

If there is any one thing in which the State Board of Health and the large representative body of educational workers should be in full sympathy, it is in the contest now going on in this State for the enactment of the "prohibitory amendment." Scientific knowledge, practical observation and common experience, cry out against the infamous business of the saloon. A municipality, a State or a nation that gives it legal countenance, commits a crime that, in this age, has no palliation. It is no longer a question of argument—it is a question of public conscience, reinforced by an enlightened public sentiment. It is everywhere conceded that the all too common use of alcoholics and their allies, patent and proprietary medicines, is fast increasing the tendency to insanity, neurasthenia, and kindred diseases. Jails, penitentiaries, hospitals for the insane, reform schools and county homes are filled to overflowing. Under present conditions we need these institutions, but we need more to study the causes which make them necessary. Charles Dickens, who by his graphic portrayal of conditions affecting the school life of the child in England, brought about such radical reforms, in a preface to one of his books urges that while society is forging bars to protect itself against the lawless and vicious, it should not neglect the placing of bars on the outside, by which the weak and those struggling against vicious tendencies and influences, may be protected.

Legislation should not be left wholly to members of the legal profession and professional politicians—however much we may regard and respect the learning and wisdom of the one, and the skill and diplomacy of the other. We need both, but I submit we need none the less the learning and the wisdom which come from personal contact with human life and the conditions which surround it. I insist that members of my own profession and public educators should lay aside false notions of retiring modesty, and should take an active interest in affairs of State.—From Proceedings of *West Virginia Country Life Conference.*

Selections

THE MASSACRE OF THE TONSIL.

By John N. Mackenzie, M.D.,

Clinical Professor of Laryngology and Rhinology in the Johns Hopkins University and Laryngologist to the Johns Hopkins Hospital.

That there are a host of conditions that call for more or less complete destruction of the tonsil is an axiomatic proposition which is not open to discussion. We have all been taking out tonsils for innumerable reasons ever since we entered our special field of work and we will continue to do so when proper occasion demands it. My contention is simply this, that in selecting our cases for operation we should be guided by a sane and safe conservatism and common sense, and not be carried away by those who, by their precept and example, are fast bringing our specialty into disrepute in the eyes of thoughtful and honorable men. * * *

From a period as long back as memory can run, the tonsil was regarded as a perfectly useless appendage which cumbered the throat, and which, therefore, ought to be gotten rid of. Like its little neighbor, the uvula, it was sacrificed on every possi-

ble pretext or when the surgeon did not know what else to do. I remember, a long time ago, in a discussion on hemorrhage after tonsillotomy before a New York society, a distinguished laryngologist made the statement that he had removed without accident many thousands of tonsils—to which declaration an inquisitive, incredulous individual present, with a mathematical turn of mind, said he had made a calculation which showed that in order to have removed that many tonsils within the limit of an ordinary lifetime the operator would have to average a bushel a day. * * *

Never in the history of medicine has the lust for operation on the tonsils been as passionate as it is at the present time. It is not simply the surgical thirst from which we have all suffered in our earlier days, just as at a still earlier period we suffered from the measles; it is a mania, a madness, an obsession. It has infected not only the general profession, but also the laity. A leading laryngologist in one of our largest cities came to me with the humiliating confession that, although holding hostile views against its performance, he had been forced to do a tonsillectomy in every case in order to satisfy the popular craze and to save his practice from destruction.

Today the laity, with or without medical advice, insist on entire removal of the tonsil for almost every conceivable infirmity. If I had time to do so, I could tell you some, if they were not so serious, amusing stories in this connection.

I will only relate one. A few days ago a woman brought her little six-year-old daughter to me to know whether her tonsils ought to come out. Her nasal and throat passages were normal.

The child was in perfect physical condition and complained of nothing. I said to the mother, "Your baby is perfectly well, why do you want her tonsils out?" "Because she sometimes wets the bed."

In the annual reports of nearly all the special hospitals for diseases of the nose and throat the number of tonsil removals, as compared with all other operations on the upper air tract and its appendages, is simply appalling. In conspicuous and refreshing contrast to the usual narratives of these productions let me quote from the last report of a well-known children's hospital in this city these words of sanity and wisdom:

"A large and annually increasing number of cases apply for operation for hypertrophied tonsils, or for adenoids. Of these the adenoids practically all need and receive operation with benefit and without injury.

"The recent universal inspection of the throats of school children has revealed the fact that nearly all children at some time of life have more or less enlarged tonsils.

"That most of these are harmless if not actually physiological, and that their removal in these cases is not only unnecessary but injurious to the proper development of the child, is our conviction.

"The rarity of rheumatism or endocarditis in children, while nearly every child has enlarged tonsils, would indicate that their removal is only exceptionally advisable unless they mechanically interfere with respiration, deglutition, or speech. When this is the case they are still best removed with the tonsillotome unless radical extirpation is necessary for other reasons."

I cannot more correctly express the general attitude on the matter than by quoting the words of Professor Swain of Yale University in the admirable paper with which he opened the debate on the subject at the last meeting of the American Laryngological Association in Philadelphia.

"When an author speaks of his experience in upwards of 9,000 cases, mentioning especially 3,000 removed within the capsule within the last six or seven years, the only method which he thinks is really worth the while—he certainly has a right to speak as an expert in regard, at least, to methods. Also, it will be readily deduced that he felt in removing tonsils thus wholly he was not depriving the patients of anything important. When it is the practice in recent years of many operators all over the country to always enucleate the tonsils as completely as possible in all cases, either children or adults, as a routine procedure, it would certainly seem to argue that in general tonsils are better out than in. The question of relative size, appearance, healthiness of structure or any such matter is apparently never thought of. Remove, anyway, and dismiss the matter as not worthy of further consideration." And, again, "It is a most excellen conditions of things to be operating laryngologist to a busy internist, who takes the entire responsibility of removal. Failure and success are alike credited against him, but it is a case of blissful inexactness which I consider deplorable."

Much wild and incontinent talk, for which their teachers are sometimes largely to blame, has poisoned the minds of the younger generation of operators and thrown the public into hysteria. Tonsillectomy, for example, is held out to them, not only as a sure cure for, but as an absolute prophylactic against rheumatism and heart disease. They are told that with the disappearance of the tonsil in man these diseases will cease to exist. Parents bring nowadays their perfectly sound children to the laryngologist for tonsil removal in order to head off these affections. Tonsillectomy is recommended as a curative during the agony of acute articular rheumatism.

But the origin of the latter disease has recently been traced to an infection of the nasal mucosa following operation. Tomorrow it will come from somewhere else. Those of us who are old enough to remember will recall the story of chorea. Years ago we found the cause of this affection in the nasal passages. When this view, after the usual struggle, had to be abandoned, it was suddenly discovered that the eye was the portal of entrance. Today it has been caught in the tonsil. If we exercise a little patience it will turn up soon in some other organ.

In considering the question of operation on the tonsils, and especially complete removal, we must face the following facts:

I. The functions of the tonsil are, in the present state of our knowledge, unknown.

Whether they are portals of entrance or avenues of exit for infection, whether they protect the organism from danger or invite the presence of disease, whether the pathogenic bacteria sometimes found in them are coming out or going in, whether they are manufacturers or storehouses of leuco- or lymphocytes, whether they represent the extreme outlying protective ramparts and that, therefore, their destruction would mean the removal of the battle-line against infection from the throat to the neck lymphatics, whether the efferent current of lymph exceeds the afferent in volume or velocity, whether, which seems probable, there is an endless flow of lymph from their interior to the free surface, which, unchecked, prevents the entrance of germs from the surface and washes out impurities from within, whether the organ possesses an internal secretion, *sui generis*, or whether, in fine, the tonsil structure is in any way essential to the well-being of the individual, are questions which have as yet received no definite solution, but which are full of interest and furnish material for instructive discussion and debate. Until the functions of the tonsil are known the final word on its removal cannot be spoken.

II. Whatever its functions may be, and the production of leucocytes is undoubtedly one of them, the tonsil is not, as is generally taught and believed, a lymphatic gland.

The general ignorance of this fact has led to the useless sacrifice of thousands of tonsils, on the fallacious assumption that their functional activity may easily be replaced by the myriads of other lymphatic glands in the body. The physiological integrity of the tonsil is of the utmost importance in infant and child life. The gland appears early in embryonic life (fourth month), attains maturity at the end of the first year of infancy, and at or about puberty tends to diminish in size. It does not develop as a lymphatic gland from a plexus of pre-existing lymph vessels in the mesothelium, but as an ingrowth of endothelium from the second branchial pouch, and, therefore, in its origin must be classed with the thymus and the thyroid, the former originating from the third and fourth branchial pouches, all by inbudding of the endothelial lining of the primitive pharynx. Gordon Wilson of Chicago has shown from various relations which the tonsil shows to the pharynx that the tonsil secretes or excretes a substance into the pharynx. In other words, we have here a structure which plays a role of importance in early life, in addition to its production of lymphocytes, and which necessitates a close relation to the pharynx. This role may be of infinite value to the infant in his earliest days of life, but which, as he grows through childhood into manhood, he is able to dispense with.

III. It is rarely possible to separate the tonsil from its neighborhood during the acute invasion or rapid progress of a microbic or toxic poison (Jacobi).

Years ago Jacobi called attention to the fact that in cases of membranous throat disease, whenever the membrane is limited to the tonsil there is little or no glandular swelling in the neighborhood. If the membrane extends from the tonsil to its neigh-

borhood, or starts at a distance from the tonsil, neighboring lymphatics swell at once.

The role of the tonsils as portals of infection, like all new doctrines in medicine, has been greatly exaggerated. To state that they are, in certain cases, the avenues through which pathogenic organisms reach other organs is simply to state an incontrovertible proposition in the light of present-day research. But to make them responsible for the long Iliad of woes which has been laid to their account is to remove the whole question from its legitimate place in the region of cold clinical fact into the atmosphere of fads and fancies. Some absorption takes place in and from the tonsil; but it is far less than that which occurs in the more abundant and receptive lymphatic structures of the nose and nasal pharynx. The tonsil, moreover, is not built anatomically as a gateway of infection.

* * * * *

The question has two sides, a purely bacteriological and a purely clinical one. If we consider the vast extent of the area through which infection can possibly take place, and if we follow the lead of experiment and that of the pure bacteriologist to its extreme limit and logical end, we may find that nothing short of the guillotine or the axe will insure the patient absolute and and certain immunity from infection through the throat.

On the other hand, when we consider the fact that there are constantly loitering around the oro- and naso-pharynx—this region is the clubhouse of the streptococcus—a miscellaneous crowd of pathogenic bacteria, and when we consider the further fact that thousands of operations are done in these regions every day and necessarily without antiseptic precautions, is it not significant at least that we meet with so little sepsis following their performance?

The chief practical lesson to be drawn from the foregoing facts is, that in cases in which the throat, and particularly the tonsils, is apparently the starting point of infection, it is mandatory to examine the entire upper air tract and not be content with appearances that are visible to the eye through the open mouth alone. How many stop their search for the cause at the tonsil and fail to explore the deeper parts of the pharynx, the retro-nasal space, to say nothing of the nasal passages and accessory sinuses? This entire region must be reckoned with, and failure to do so has probably sent more than one to his grave. I know of a number of cases of fruitless removal of the tonsil which have only gotten relief when treatment was subsequently directed to the nasal cavities and post-nasal space. Not to mention many others, I am forcibly reminded of a case of general poisoning and wrecked health in a young woman in whom I had thought I had traced the source of infection to an antrum maxillary empyema. As there was no escaping pus, my diagnosis was not accepted by the family and attendant, and I was not even permitted to make an exploratory puncture. I am unable to say what operation, if any, was done, as she naturally passed out of my hands. But as she grew rapidly worse, and as the futility of the treatment became apparent, my advice was finally reluctantly and doubtfully taken, the antrum was opened, the fetid contents evacuated, and the patient, under appropriate treatment, went on to speedy and complete recovery.

I could tell you, also, of cases in which the tonsil has been held responsible for the morbid condition, and has been partially or completely removed, in which relief has only been secured by the discovery and treatment of disease in the nose and retro-nasal space. And of far graver, far-reaching and deeper significance are cases of infection in which life has doubtless been sacrificed by clinging to the lazy and stupefying delusion that the tonsil is the sole portal of poisoning.

The hypertrophied lymphatic tissue of the vault of the pharynx (adenoids) does harm chiefly through obstruction. Restore normal respiration in the child, and in a large number of cases the tonsils will take care of themselves. Even if the glands should remain large, if they are giving no trouble they may be safely left in situ, for as their growth does not go on pari passu with the growth of the rest of the pharynx, the time soon comes when they become inconspicuous in the fully developed fauces.

The mere size of the tonsil is of itself no indication for removal except it be large enough or diseased sufficiently to interfere with respiration, speech, or deglutition, in which case it, or a sufficient portion, should be taken away without delay. A large tonsil does not mean necessarily a diseased ton-

sil, nor does a small tonsil always indicate a healthy organ. Tonsils apparently diseased may consist of normal tissue and, on the other hand, perfectly normal looking glands may be found pathological microscopically. The tonsil may be greatly enlarged, may extend far down into the pharynx or be buried deeply in the palatine arcade, and yet not interfere with the well-being of the individual. Such tonsils are the special prey of the tonsillectomist. If they are not interrupting function, they had best be left alone, for they are doing no harm. The change in anatomical relations after operation is often so great that function is crippled more after their complete removal than it was before. Moreover, it occasionally happens that the resurrection of a "buried" tonsil is followed by the burial of the patient.

A most interesting and instructive part of this subject is the occurrence of tonsil disease, with or without cervical adenitis, from infection from the nasal passages (from pus cavities, operations, etc.) and the improper care of the teeth during dentition. Wright, of Boston, reports a remarkable series of 150 cases in which operation on the tonsils was deferred until after the eruption of the molars, not only in the six, but in the twelve-year period, and when dentition had been completely accomplished the enlarged cervical lymphatic glands disappeared, together with the swelling of the tonsils.

The practical illuminating lesson of these observations is, that if, in infancy and childhood, we pay more attention to the neglected nasal cavities and to the hygiene of the mouth and teeth, we will have less tonsil disease and fewer tonsil operations.

Tonsillitis not infrequently follows operations on the nasal cavities, especially if pus be present, or even after a cold in the head. Experimental work along this line would seem to indicate that infection takes place through the lymphatics. Thus, in the carefully conducted experiments of Lenhardt, it was found, among other things, that foreign matter, even when injected into the mucous membranes of one nasal passage, was found in both tonsils a short time after the injection.

In the permanent removal of tonsil disease equally good and in the long run even better results may be obtained in a large percentage of cases by measures less radical than those usually employed at the present time. Out of a multitude of examples, take the case of recurring quinsy, for which complete enucleation is done. In this condition it has been found that it is frequently only necessary to thoroughly slit up and shrink the upper lobe of the tonsil. Most quinsies occur in this situation, and the destruction of that part of the tonsil is all sufficient to prevent recurrence. By this method enough of the organ is left to entirely perform its functions, and the ultimate development of quinsy of the lateral columns of the pharynx which follows sometimes complete removal is avoided.

THE ONLY OR FAVORITE CHILD IN ADULT LIFE.

By A. A. Brill, Ph.B., M.D., New York City.

(From an excellent paper on this subject in the *N. Y. State Journal of Medicine*, Aug. 1912, we make a few extracts.)

* * * * *

(a). Whether *burdened by heredity or not* the adult only child usually shows one prominent feature, namely, he is a very poor competitor in the struggle for existence. Having been carefully reared and constantly watched by his loving mother he remains forever "mama's boy." He is devoid of those qualities which characterize the real boy, he lacks independence, self-confidence, and practical skill which the average boy acquires through competition with other boys.

Owing to the fact that the only boy constantly associates with grownups he is usually precocious even in childhood, and as he grows older he finds it very hard to associate with people of his own age. I know an only boy of 19 years who has not a single friend, he is practically asocial. He wishes to associate only with people much older than himself and cannot adapt himself to the society of young people because "they bore" him. Some time ago I was consulted about another only boy, 7 years old, because, as his mother put it, he did not get along with other children, and because he was a real blase. He was not interested in anything; toys, pets, books, etc., etc., that would have been sufficient to de-

light the hearts of a dozen children had absolutely no charm for him. He was in constant need of new excitements and as they could not be supplied quickly enough he was unhappy and morose.

The only child is usually spoiled and coddled because the parents gratify all his whims and have not the heart to be severe with or punish him when necessary. This has its evil consequences in adult life for the slightest depreciation hardly noticeable by the average person is enough to throw him into a fit of depression and rage lasting for days and even for weeks. An only daughter attempted suicide because her best friend received more attention than she at a social gathering.

It is due to the undivided attention and abnormal love that the only child gets from his parents that he develops into a confirmed egotist. He is never neglected in favor of sisters and brothers, he is the sole ruler of the household, and his praises are constantly sung, it is therefore no wonder that the only child becomes vain and one sided and develops an exaggerated opinion of himself. In later life he is extremely conceited, jealous and envious, he begrudges the happiness of friends and acquaintances and he is therefore shunned and disliked. A favorite son, a bachelor of 62 years, a wealthy retired merchant, told me that whenever there was a rise in the market he suffered from severe depression and fits of envy simply because he knew that some of his friends would make some money. He himself had no personal interest in the market. Such qualities are surely not conducive to happiness, and it is not at all surprising that almost all such children are selfish, unhappy, and morose.

(b). The specific findings are of still greater interest. Of the 400 cases observed there were 172 men and 228 women, their ages ranged from 18 to 68 years. The morbid manifestations were as follows:

The predominant feature in about 36 percent. of my cases was the abnormal sexual life; most of them sought treatment for homosexuality, psychic impotence (men) and sexual anesthesia (women); there were also some exhibitionists, voyeurs, sadits, and masochists. About 18 per cent. suffered from the various types of dementia præcox, and the rest represented the different forms of the psychoneuroses.

No statistical conclusions should be drawn from these figures, as most of these patients came or were sent to me for treatment because they suffered from psychoneuroses or from the other maladies enumerated above; they show, however, the marked prevalence of only or favorite children in these classes. * * *

A number of my homo-sexual patients told me that their mothers were actually jealous of every woman with whom they chanced to come in contact, and behaved exactly as if they were confronted with a rival. No one is good enough for such children, the parents think. They unconsciously want their sons for themselves and are jealous of every other woman. It is a sex jealousy pure and simple. The majority of only children do not marry at all or they marry some near relative whom they unconsciously identify with their parent image. The *probable average* of my patients' ages was 34 years, but only 93 out of the 400 had been married. Most of them remained old maids or bachelors.

Just a few words on prophylaxis. Of course it would be best for the individual as well as the race that there should be no only children. However, when this cannot be avoided by virtue of ill health or death of one of the parents the child need not necessarily become a neurotic and belong to any of the categories mentioned above. It all depends upon his subsequent bringing up.

When we read the history of only children we find that only those who have been brought up wrongly develop into abnormal beings, those who are not pampered and coddled have the same chances as other children. As classical examples we may mention Nero and Confucius, the former a spoiled child, while the latter was a well-bred only child. An only child should be made to associate with other children who will soon teach him that he is not the only one in the world. This should begin at a very early age. I have seen many "nervous and wild" only children who were completely changed after a few weeks' attendance in a kindergarten or public school. But what is still more important is that only children should not be gorged with parental love. Parents should take care that such children should not develop an exaggerated idea of their own personality and think that

they are superior to everybody. For individuals imbued with such paranoid ideas are bound to come into conflict with their fellowmen. What is true of the individual may also be true of a race, and history furnishes us with a nice example. * * *

In a study of the history of the Jews we find that their enforced isolation was the result of an early, voluntary clannish exclusiveness. This shows the striking analogy to the only boy who at first refuses to associate with others because he believes that he is superior to everybody else, and who is later excluded from social relations because he is misunderstood and disliked. Dr. Fishberg also tells us that as soon as the barriers are removed the Jews readily assimilate and all former prejudices disappear. The only boy, too, loses his identity as soon as he realizes that he is no better than his fellow beings.

The problem is more complicated when we come to the prophylaxis in reference to psychosexuality and I regret that I am unable to discuss it here. I shall merely say that parents should remember that proper sex regulation does not necessarily mean repression and extermination of all sex feelings, and that the requisites for perfect manhood and womanhood are all the impulses and desires that are normally common to men and women.

In conclusion I wish to say that the only child is a morbid product of our present social economic system. He is usually an offspring of wealthy parents who, having been themselves brought up in luxury, and anxious that their children should share their fate, refuse to have more than one or two children. By their abnormal love they not only unfit the child for life's battle but prevent him from developing into normal manhood, thus producing sexual perverts and neurotics of all descriptions.—*New York State Journal of Medicine.*

Hemmeter recommends in rhus poisoning an alkaline hot bath to be followed by a scrubbing of the parts with green soap and 85 per cent. alcohol. After drying, ung. hg. ox. flav. with ½ grain morphin to the drachm, is freely used. At night there is great relief from the irritation by applying adrenalin chlorid in very dilute ointment form.

TREATMENT OF SUMMER GASTRO-ENTERIC DISEASE IN CHILDREN. (THE CHOLERAIC FORMS).

By LeGrand Kerr, M.D., of Brooklyn, N. Y.

As was suggested in a previous communication, the treatment of summer gastro-enteric disease in children should begin before the heated term. In the management of the choleraic cases, the effort must be made to support the patient and place him in a position to bear up until the acute symptoms subside. Everything should be made subservient to the conservation of strength.

Enforced rest (preferably in the open) should be instituted immediately. Rest of mind as well as of body is needed, therefore, a single attendant is desirable.

Stomach washing is useless (vomiting empties the stomach and is dependent upon the toxemia) and bowel irrigations are unnecessary. Absolute abstinence from all food and fluids is indicated for many hours (12 to 36), and the first administration of fluid (sterile water) must be at long intervals (2 to 6 hours) and in small quantities (few drops to a tablespoonful). With the subsidence of vomiting, thin cereal gruels may be used frequently (every 15 minutes), in small (1 dram) but increasing (tablespoonful) amounts. The return to milk must be cautious and very gradual. It is only safe to allow one or two feedings of small quantities at first and then individual judgment must be displayed, but more cases are fed too early and too freely than not. Use skimmed milk at first. Proprietary foods are harmful from the usually large percentages of sugar. Albumin water (popular but deceiving) is of small value and may do much harm, adding a putrefactive element which leaves us uncertain as to its part in a foul-smelling stool.

Alcohol is disturbing to the stomach and vomiting is a contra-indication to it, therefore meat extractives containing it are apt to be poorly tolerated; they are best withheld.

Soiled napkins demand immediate removal and adequate disinfection.

Stimulants (always) and sedatives (usually) are the only forms of medication that are indicated. These must be given hypodermatically, except in rare instances (as not more than two emergency rectal injections). After thorough experimentation, I have found the most dependable stimulant to be tincture of strophanthus. This is given with brandy in the serious cases and alone in the less severe.

Morphine is the best sedative (acting indirectly as a cardiac stimulant also) being certain, safe, and prompt, and its action is enhanced by the addition of atropine (which lessens excessive loss of fluids).

For subnormal temperature, use the hot bath (105 to 110 degrees F.) for a short period (three to five minutes) and repeated every 30 to 60 minutes, if the indications are present.

For hyperpyrexia, use the cool pack (85 degrees F.) by wetting the sheet every 30 to 60 minutes as indications suggest and without disturbing the patient.

For cold extremities use hot bottles and bags (but not in the usual manner). The writer's experience has taught that a few minutes' local use of mustard water (hot) prepares the patient for the comfort and protection that should come from hot bottles. Use the mustard water first; then apply the bottle or bags. Bags and bottles alone take hours to accomplish desired results: test it yourself, using both methods.

Promptly and thoroughly protect all excoriated surfaces; they are dangerous.

Rectal injection of hot coffee, brandy or camphor is justified in extreme cases (if not repeated more than once).

Hot (105 to 110 degrees F.) saline solution per rectum, given very slowly (if possible by Murphy drip) is often serviceable after excessive peristalsis has been controlled (to supply fluid; not as irrigation). Hypodermoclysis is rarely indicated. The milder and the more common type of cases demand an entirely different treatment and will be considered in a future communication (in this journal).

Relapses are rare in the choleraic cases; these choleraic forms result in early death or prompt recovery (proven by autopsy). However, ileo-colitis as a sequel is most common in occurrence.—*Long Island Med. Journal.*

THE BOY PROBLEM.

Few persons seem to realize what boys should be. Many judge them solely from their own viewpoint and praise that boy who gives them the least trouble. Girlish boys are of little value in after life—the irrepressible pushing, grasping, noisy, fighting, scheming, domineering leader in mischief, the one who asks questions instead of learning his lessons by rote, is practising for future leadership among men. The boy who gives no trouble is not likely to be a successful fighter in the battle of life.

The qualities that make boys troublesome should be studied and so directed as to lead to useful results. Give me the wildest boy in town, and you may have the one who is content to wear a Fauntleroy suit and tries to keep it clean. Twenty years hence your boy will be clerking for mine.

Every boy begins with a sense of rectitude that is natural to him. Bank on it, recognize it, cultivate it, and the boy is your chum. If he is not, you are not the man to raise that particular boy. Boys are their own best disciplinarians. They instinctively abhor a yellow streak in their mates, and will do far more than you can to eradicate it.

A children's court should be one of the first things instituted. This tribunal should have jurisdiction over all disputes between members, and apportion the duties of each; for everybody should have certain tasks to be fulfilled for the common benefit. The character of and hours for work, for study and for play, and all the multifarious questions sure to arise in any community should be settled by the children themselves.

As to work—there are trees to be felled, roads to be cleared and graded, sand hills to be cut down, houses to be built. A capable man should show the boys how to mix and mold cement blocks, and how to build a chimney that would not smoke. A good carpenter should direct the erection of the cottages, and a farmer supervise the planting and cultivation of the garden. Every child should have a plot for personal care and profit. Parasites on fruit-trees should be sought and spraying done properly. The motor boat and automobile should give the mechanically inclined congenial occupation, and canoes and skiffs enable all to attain

proficiency in their management. Fishing, nutting, shooting and trapping game, so far as they might be pursued in accord with the laws of the State, offer an outlet for many a boyish spirit. A weekly dance; an assembly room where we ourselves furnish the entertainment; indoor games for wet weather, and every known outdoor sport in their season, and such moral training as does not warp or prejudice the plastic minds of the young are to be included in our plans.

The Growing Boy's Education.

Especially should the principles of sanitation be taught. Every case of illness should be traced to its causes, and these made plain to every member, as well as the means of avoidance.

The education of a boy commences with his birth. Only a small part of it comes from school studies, although this is essential; but when one reflects how tedious is this part and how the pupil rebels against it, he can but wish that this too, might be imparted and acquired naturally, as one learns of the beasts by observing them. Is that a wholly impossible ideal?

One of the most effective means of teaching facts and inculcating principles is by stories. Three generations of little ones have sat by me and drunk in my stories with an avidity that has never been satisfied. With all, the one tale most absorbing has been that of the development of man—evolution. The boy and girl who were lost in the woods, how they built shelters in the trees and hollow stumps, later digging caves; used clubs, then spears; the enormous step taken when the string was discovered, and the spear was fitted to a bow and became an arrow; the capture and taming of the dog and the other domesticated animals; the progress of the search for food, from berries, roots, and fungi to flesh, then to grains, and to cultivation; the discovery and utilization of metals, and all the rest. Whatever else might be told the children, they always demanded this tale, which never ended, as the experiences multiplied and extended. Primitive isolation, the development of the family and later the clan, imparted the lessons of interdependence and altruism as no precept could possibly have done. The results of a selfish appropriation of good things, and of self-preservation at the sacrifice of others, were easy to depict in a way to render such faults vividly appreciated.

Boys love to work. Their play is usually work. Give them a chance to use tools, show them how to use them properly, and they will be satisfied. Lazy! The trouble is to keep them in work. Each should do a fair share of the community work, and have enough of his own to do also—work for which he makes a profit—gardening, mechanic, tending animals or chickens, something from which he may draw his spending money. With the ideal bathing and the sport offered by this place, there should be no dearth of amusements for boys and girls. —*W. F. Waugh in Am. Jour. Clin. Med.*

INFANT FEEDING WITH UNDILUTED COW'S MILK.

Handbridge, in *N. Y. State Jour. of Med.*, tells us this subject has occupied his attention many years. He found that certain infants whom he had been called to see had been fed upon whole milk and had apparently thriven under it. By degrees he was led to investigate the matter practically and in his paper he reports thirty-five cases thus nourished with entirely good results.

He feels sure that the statements, oft repeated, that infants cannot digest unmodified milk is not true.

His observations convinced him that an average infant would be sufficiently nourished on one and three-quarters to two and a quarter ounces of undiluted cow's milk per pound weight in twenty-four hours.

The chief advantage in whole milk seemed to be that its abundant nitrogen must count for good development of the muscular system in infants thus nourished.

He concludes that if whole milk was good for the thirty-five sick babies thus nourished it must also be good for well babies with good digestive powers.

Feeding an infant only when hungry on this concentrated food seems to him a natural and rational procedure.

He begins with a small quantity, increases a little with each feeding, adding sugar, cream or lime water if circumstances demand it.

Many babies have survived and even thriven on a diet of whole milk, or even substances less well-adapted for an infant's stomach. Doubtless a great many more have succumbed under such nourishment, so the argument of the writer doesn't prove much except for the cases which came under his observation. He also fails to tell us whether he used the milk at body temperature or lower and whether the milk used was rich in fat or otherwise. To reduce the question of infant feeding to absolute simplicity has thus far been unattainable.—*Med. Review of Reviews.*

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Editorial

Do not fail to attend the annual meeting of the State Association at Charleston May 21st to 23rd. The local committee is making fine arrangements for the entertainment of members and accompanying ladies. A fine program has been arranged by the Secretary. Although fifty papers are announced, all may be heard and discussed, as two halls will be occupied at the same time. In one the surgical papers and those of the new Eye and Ear Section will be heard, and in the other the medical papers. This is to be the best meeting in the society's history. Come and greet our doctor Governor, who has already demonstrated that he can do some other things quite as well as he can do surgery.

EDUCATION IN SEX HYGIENE.

Recognition of their responsibility has resulted in a marked awakening of physicians to their obligations as leaders and teachers in the science of keeping well. The essence of preventive medicine is education, and physicians, by virtue of their training, experience and ideals, ought to be leaders and teachers. Yet until within a few years their responsibilities were not recognized in the prevention of venereal diseases and education in the hygiene of sex.

The earlier policy of silence and repression in regard to these matters is fast changing not only on our part but on the part of parents and educators. The sinister menace of venereal disease can hardly be overestimated. In the United States 770,000 males reach early maturity annually. At least 60 per cent., or 450,000 of these young men, will at some time become infected with venereal disease, 20 per cent. before the age of 22, 50 per cent. before 25, and over 80 per cent. before they pass 30. This is the morbidity among males reaching 16 in any one year. Each succeeding year adds a similar group to the aggregate.

Syphilis and gonorrhea undoubtedly surpass in prevalence all other infectious diseases combined, and their immediae and disabling effects fall most heavily on the most active and productive period of life. Gonococcus infection alone is responsible for 80 per cent. of all deaths from inflammatory diseases peculiar to women, and over 60 per cent. of all the work done by gynecologists; 50 per cent. or more of these infected women are left irremediably sterile besides the number whose offspring are still-born, premature, weakly, diseased or mentally defective.

Considering the terrible ravages of these diseases and their wide prevalence, our efforts at preventive measures have been woefully inadequate, says the *Journal of the American Medical Association.* The community and state assume immense burdens in the care of victims of such conditions as deaf-mutism, mental defectiveness, general paralysis, blindness and many others. Yet the prevention of a large percentage of these conditions by prevention of syphilis and gonorrhea receives but meager attention. If bubonic plague had but a fractional percentage of the incidence of these diseases all hands would be joined to drive it out. Cholera in a civilized country today is no such social and national menace as venereal disease. We appro

priate great sums to fight certain epidemic diseases and to maintain a rigid quarantine against them, but we are only now beginning to wage warfare against diseases which are as dangerous as any epidemic disease and far more dangerous than many.

There are various points of attack in this problem and various closely related problems. But there is one point of attack in combating the spread of venereal disease which is justly regarded by many experienced workers as the most vital and strategic, and this is the education of the young. There has been an upheaval in pedagogic and social sentiment in the last few years regarding the question of sex-teaching in home, school and college. Conventional prejudice against such teaching is giving way rapidly, and results are already beginning to appear. Educators are coming to believe that these subjects have a rational and vital place in the educational system.

THE PRACTICAL VALUE OF BIRTH-REGISTRATION.

The practical value of a birth-certificate has often been commented on. A recent criminal trial in North Carolina shows the importance of such records. In the case of the State versus Goodlake, the question of the guilt or innocence of Goodlake depended on whether a girl was or was not 14 years old. It was admitted that she was over 13, but it was claimed that she was not yet 14. How was this point proved? In a state which had had modern birth-registration for fourteen years, this would have been easy. The court would have called for a certified copy of the girl's birth-record. But in North Carolina there has been no birth registration. How could the court ascertain the facts? An old family Bible was found with a record of the child's birth; the monthly report cards of her school teacher were introduced, and the teacher identified her records, and an old negro nurse testified as to the age of the child. Family Bible records are known to be loosely kept, entries often being made months or even years after the events. The school teacher's records were only corroborative, while the "black mammy's" recollections after thirteen years were practically worthless. But the jury decided that the girl was 14 years old and sent Goodlake to the penitentiary for eight years. *The Journal of the American Medical Association,* commenting in this case, says: "We know nothing of the merits of the case, of the guilt or innocence of the accused, or of the justice or injustice of the verdict. But for a modern, civilized state to have to resort in court to such methods to prove the age of one of its wards is supremely absurb." Evidently the people of North Carolina have come to the same conclusion, as the state legislature has just passed the model bill for the registration of births and deaths. After this law is once fairly in working order, such occurrences as those which marked the Goodlake trial will be impossible. Illinois, Iowa and Tennessee have the same measure before their legislatures, and it is hoped it will become a law in each of these states. How about West Virginia?

A PERMANENT COURSE IN TROPICAL MEDICINE AT THE UNIVERSITY OF MARYLAND.

The course of some twenty lectures at the above Medical School, by our former W. Va. boy, Dr. J. A. Nydegger, U. S. Public Health Service, is about ended. These lectures have been very interesting and instructive, having been illustrated with lantern slides. The Faculty has decided to continue this course, which will be resumed at the beginning of the October term. The whole field of tropical medicine will be covered. Cases of tropical diseases will be exhibited. This course of lectures will fill a much felt want. During the past winter the following lectures, among others, were delivered: Hook Worm by Dr. Stiles; Yellow Fever, by Dr. Carter; The Plague, by Dr. Blue; Pellagra, by Dr. Lavinder, all of the Public Health Service. On May 11th, Dr. Nydegger will lecture (with lantern slides) on Spirochaetosis ;on May 18th, on The Relation of the Mosquito to the Malarias and their prophylaxis.

WILL MAKE BABIES IMMUNE TO TUBERCULOSIS.

An interesting experiment for the purpose of creating immunity against tuberculosis is being tried in Pittsburgh under the direction of the Tuberculosis League of that city. Dr. William Charles White, Medical Director of the League, says it will probably take ten years before definite results of the work will be appreciated. The experiment is being conducted on the theory that much, if not all, tuberculosis infection begins in childhood. In view of this fact, the League is aiming to supervise the growth of every baby born for the next ten years in the South Side district of Pittsburgh. The babies and their mothers will be taken in charge at the birth of the infant, and everything possible will

be done to increase the resisting power of the child to disease and to make it thereby immune to tuberculosis infection. The theory of the Society is that by fortifying the body in the earliest period of a child's life, the infant will, in most cases, become immune to the diseases with which heredity and environment may threaten it.

The American Proctologic Society will hold its fifteenth annual meeting in Minneapolis June 16 and 17. Headquarters and place of meetang at Hotel Radisson, Seventh Street and Nicolet Avenue. A fine program has been prepared. The profession is cordially invited to attend all meetings.

WANTED.—No. 7 of Volume V of the W. Va. Medical Journal.

W. B. Saunders Company, Publishers of Philadelphia and London, have issued another edition (17th) of their handsome illustrated catalogue. We find it describes nine new books and ten new editions, not described in the previous issue. These new books are of great interest to the medical man, because they treat of subjects being daily discussed in medical circles.

Any physician can get a copy of the Saunders' catalogue by dropping a line to these publishers.

THE PALLID SCHOOL GIRL

In view of the modern methods of education, which force the scholar at top speed, it is not to be wondered at that the strenuous courses of study prescribed for the adolescent girl more than frequently result in a general break down of both health and spirits. Each winter the physician is consulted in such cases and almost always finds the patient anemic, nervous and more or less devitalized. In most instances a rest of a week or two (together with an efficient tonic, enables the patient to take up her school work again with renewed energy. Pepto-Mangan (Gude) is just the hematinic needed, as it acts promptly to increase the red cells and hemoglobin, and to tone up the organism generally. It is particularly suitable for young girls because it never induces or increases constipation.

FACTS ABOUT PHYLACOGENS.

Practitioners are urged to turn to the display announcement in the current issue of this journal bearing the signature of Parke, Davis & Co. Here, under the title "The Value of the Phylacogens," one finds the results in 4148 cases of infectious disease that have been treated with Phylacogens. One also reads in detail what is credited to each individual Phylacogen. You see at a glance that a certain number of rheumatic affections have been treated and reported; and how many of them were treated successfully. This is equally true of pneumonia, erysipelas, gonorrheal and mixed infection cases. These figures tell what every practitioner of medicine wants to know or should know. We commend the announcement to our readers.

ThePurdue Frederick Company will be very glad to send any physician a sufficient supply of Gray's Tonic, if he is not already familiar with its unique qualities, to test same. We promise each one of them positive results, if they will simply take the trouble to know more about Gray's Glycerine Tonic Comp. As stated above, they are prepared to provide a generous supply, all charges prepaid from New York. Gray's Tonic is advertised exclusively to the Medical Profession in all parts of the United States.

State News

PROVISIONAL PROGRAM OF THE 46th ANNUAL SESSION OF THE STATE MEDICAL ASSOCIATION.

The following papers have been promised. No doubt there will be some changes as to papers and time of delivery. The complete program will be in the hands of the members some days before the meeting. It will add to the interest of the meeting if the members will select from this list some themes they may be especially interested in, and prepare to discuss them. The local committee is preparing entertainments for members and the ladies.

1. President's address, Dr. Frank L. Hupp.
2. Toxemias of Pregnancy, A. V. Weinberger, Wheeling.
3. Early Extrauterine Pregnancy, S. L. Jepson, Wheeling.
4. Ovarian Degeneration in Relation to Retrodisplacements of the Uterus, R. J. Reed, Wheeling.
5. Cesarian Section, H. H. Carr, Fairmont.
6. Public Address, C. A. L. Reed, Cincinnati, Marriage and Eugenics in Race Culture.
7. Oration in Surgery, R. E. Venning, Charles Town.
8. Importance of Early Recognition of Surgical Lesions of the Liver and Bile Ducts, C. R. Ogden, Clarksburg.
9. Rupture of the Liver, J. E. Cannaday, Charleston.
10. The Dislodged Kidney, W. S. Fulton, Wheeling.
11. Surgical Procedures in Epilepsy, Jas. R. Bloss, Huntington.
12. Local Anesthesia in Herniotomy. T. K. Oates, Martinsburg.
13. New Instruments and Appliances, W. P. Megrail, Wheeling.
14. Demonstration of the Latest X-Ray and radio-photographic apparatus, W. A. Quimby, Wheeling.
15. Early Diagnosis and Treatment of Malignant Tumors, J. Edward Burns, Wheeling.
16. Fractures, J. W. McDonald, Fairmont.
17. Oration in Medicine, Conservation of National Resources, A. A. Shawkey, Charleston.
18. The Pulse, Charles O'Grady. Charleston.
19. The Value of Blood Pressure Estimation, J. I. Goff, Parkersburg.
20. Present Status of Rheumatism, Milton Mc. Neilan, Parkersburg.

21. Cerebral Arteriosclerosis, C. W. Halterman, Clarksburg.
22. Etiology and Classification of Rheumatism, C. F. Covert, Moundsville.
23. Pellagra—Report of Cases, A. Maiers, Charleston.
24. Constipation from the Proctologic Standpoint, Guy Yost, Fairmont.
25. Some Considerations in Life Insurance Examinations, John T. Thornton, Wheeling.
26. The Psychoneuroses, Their Understanding and Treatment, Smith Ely Jelliffe, New York.
27. The Present Status of Preventable Diseases, W. T. Henshaw, Martinsburg.
28. Observations on Diphtheria, W. H. McLain, Wheeling.
29. Typhoid Fever, C. D. Lind, Greenwood.
30. Report of One Hundred Cataract Operations, J. L. Dickey, Wheeling.
31. Albumenuric Retinitis—A Case, L. C. Covington, Charleston.
32. Purulent Ophthalmia, E. R. McIntosh, Elkins.
33. Mastoid Surgery, H. E. Oesterling, Wheeling.
34. Complications of Otitis Media, M. B. Kelly, Wheeling.
35. Etiology of Milium, G. A. Aschman, Wheeling.
36. Earache, T. W. Moore, Huntington.
37. Chronic Suppuration of the Middle Ear, H. R. Johnson, Fairmont.
38. Nasal Headaches, E. A. Hildreth, III, Wheeling.
39. Submucous Resection of the Nasal Septum, V. T. Churchman, Charleston.
40. Present Status of Adenoid and Tonsil Surgery, Ivan Fawcett, Wheeling.
41. Surgery of the Nasal Accessory Sinuses, H. H. Haynes, Clarksburg.
42. Management of Syphilis from the Modern Viewpoint, Victor Pedersen, N. Y.
43. A Case for Diagnosis, E. S. Dupuy, Parral
44. A Chapter from a Possible History of Medical Legislation in W. Va., W. W. Golden, Elkins.
45. The Need of State Sanitary Inspection, W. A. McMillen, Charleston.
46. Ethics *versus* Commercialism, J. E. McDonald, Logan.
47. What Can We Do to Improve Our Society? H. E. Thompson, Bluefield.
48. Relations of the Nasal Accessory Sinuses to One another, with demonstrations with wet specimens, John W. Murphy, Cincinnati.
49. Surgical Treatment of Goiter, Andre Crotti, Columbus.
50. Urological Diagnosis, illustrated with lantern slides, F. O. Smith, Cincinnati.
51. Some Considerations in Pathology, Diagnosis and Treatment of Malignant Tumors of the Breast, John B. Deaver, Philadelphia.

Capt. John Clark, the veteran book seller, who roamed through W. Va. for years selling medical books, is reported as hopelessly invalided at Grand Caymen, Kingston, West Indies. Some medical friends in Charleston recently sent him a box of surgical supplies to dress his ulcerated stumps. He is said to be in need of the necessities of life.

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Dr. G. C. Robertson of Clendenin, is taking a coure of post graduate work at the New York Post Graduate medical school.

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Dr. Jas. R. Bloss has severed his connection with the West Va. Asylum, of which he has been for some years a most valuable assistant physician, and taken up practice with Dr. Enslow of Huntington. We have hoped to see the doctor in charge of one of the State Hospitals for the Insane, a position for which he is so eminently qualified, but politics does not always take note of qualifications in making appointments. We wish for the doctor abundant success in his new field of labor. That he deserves it we know. His place in the Asylum is taken by Dr. W. H. Keatley of Wevaco.

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Dr. C. J. Scott of Parkersburg, recently returned with his wife from Florida, where they passed the winter, has determined to locate in that state. We have not learned the name of the town.

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Dr. Jas. Nelson of Parkersburg, has accepted a position as interne in a Pittsburgh hospital.

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Dr. O. D. Barker of Parkersburg, is in Baltimore taking a course of work in genito-uninary diseases. He has not decided where he will locate.

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Dr. Rolla Camden is reported convalescent from a surigcal operation done by Dr. Bainbridge in New York.

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Congratulations to Dr. A. H. Kunst of Parkersburg, recently returned from a bridal tour.

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Removals:

Dr. G. B. O'Roark from Huntington to Grayson, Ky.

Dr. A. F. Haynes from Huntington to Big Wells, Texas.

Dr. W. S. Hutchins from Wheeling to Oberlin, Ohio.

Dr. W. J. Judy from Webster Springs to Glen Falls. He is with the Consolidation Coal Co.

Dr. I. E. Coleman from Fayetteville to Beckley. The doctor has opened a private hospital with twenty-five beds in Beckley. Dr. E. J. Grose has taken charge of Dr. Coleman's hospital in Fayetteville.

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Dr. L. D. Wilson has returned from a protracted visit in South Carolina and Georgia.

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Dr. Harriet B. Jones expects to devote much time to the tuberculosis exhibit during the next few months. The legislature at its recent session made an appropiration that will enable many of the towns and cities of the state to have the benefit of this exhibit with accompanying lectures from Dr. Jones and other physicians.

Reviews

KEEN'S SURGERY VOLUME VI.—The Volume with the newest Surgery. By 81 eminent surgeons. Edited by W. M. KEEN, M. D. LL. D., Hon. F. R C. S. (Eng. and Edin.), Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Phila. Octavo of 1177 pages, with 519 illustrations, 22 in colors. Philadelphia and London: W. B. Saunders Company, 1913. Entire work, consisting of six volumes, per volume: Cloth, $7.00 net; Half Morocco, $8.00 net.

This supplementary volume to Keen's Principles and Practice of Surgery is on our table for notice. It will surprise the possessors of the previous five volumes, which were supposed to complete the work, to know that a supplementary volume has been compiled. It is doubtful if the dignity of the work has been maintained—it certainly has not been increased—by this issue. One cannot dismiss the impression that it partakes more of the character of a Year Book or Annual than of a dignified treatise. It is not meant to imply that the contents are not valuable, or that the advances and improvements therein set forth are of secondary or ephemeral importance. Quite the contrary. For the most part they are essential to a thorough knowledge of up-to-date surgical progress, but if the motive underlying its compilation is to continue active, it will mean, in a year or two later, another volume of like character.

The volume comprises seventy chapters, the contributions of sixty-two different authors. Most of these are supplementary to chapters on the same or kindred subjects by the same authors, contributed to the previous five volumes. In some instances, however, the authors of the supplementary chapters are not the ones who contributed the original chapters. A few chapters are entirely new. These are, one by Clark, on "The Use of Electric Desiccation, Fulguration and Thermo-Radiotherapy"; with an added note by Keen, not altogether germane, one would think, "On Treatment of Mouse Cancer by Elsin and Selenium." One by Crile, "Anoci-Association"; one by Meltzer, on "Anesthesia by Intratracheal Insufflation"; one by Kuemmell, on "Intravenous Ether Anesthesia"; one by Meyer, on "Anesthesia in Differential Pressure Chambers, Cabinets and Other Apparatus for Thoracic Surgery," and one by Pearce, on "The Phenolsulpho-naphthalein Test for Functional Activity of the Kidneys." The supplementary chapters range, in the amount of matter they contain, from ninety pages, on the "Surgery of the Female Genito-Urinary Organs" to two pages on "Gonorrhœa and Complications," and a page and a half on "Legal Relations of the Surgeon." Of this matter, much is new. Considerable has been furnished by the authors, evidently to cure defects and omissions in the chapters which they had contributed to the previous volumes. As we turn through the book the following chapters may be singled out as fairly illustrating the scope and variety of its contents. On Fractures, 32 pages, by Eisendrath; Surgery of the Hypophysis, 40 pages, by Lewis and Kanavel; Thyroids and Parathyroids, by C. H. Mayo; Thorax, 28 pages, by Brewer; Stomach, 31 pages, by Mayo-Robson; Intestines, 34 pages, Van Hook and Kanavel; Vermiform Appendix, 43 pages, by Murphy; Female Genito-Urinary Organs, 90 pages, by Montgomery and Fisher; Spinal Anesthesia, by Houghton. The limits of this notice will not permit mention of other chapters, but it is sufficient to say that throughout the entire scope of the seventy-two chapters, and this comprehends practically the whole field of Surgery, the reader will have presented to him the latest and most authoritative knowledge pertaining to the subjects dealt with. A defect which we pointed out in our notice of the last of the five volumes previously issued, was the absence of a general index to the whole series. In this sixth volume, this omission has been remedied. A full general index to all six volumes closes the book. Indeed we have a suspicion that to supply this was one of the reasons for issuing this last volume. As to the mechanical features of the book, the print, illustrations and binding are fully up to the standard of the previous volumes. We regret to say, however, that the paper used is not to our liking. Already, in the volumes that have preceded this one, it has lost its freshness and is turning an unattractive yellow. But when all is said, this series of six volumes is a most valuable, one might say, indispensable, part of a surgeon's library, and one that he could not afford to be without.—W.

DIET AND HYGIENE IN DISEASES OF THE SKIN—By L. DUNCAN BULKLEY, A.M., M. D., Physician to the New York Skin and Cancer Hospital. Paul B. Hoeber, N. Y., $2.50.

This is one among the number of small books the author has written on affections of the skin. This subject embodies the author's personal observations. It is presented in the form of six lectures as delivered in his clinical course at the New York Skin and Cancer Hospital. The book is written in practically conversational style, but it is not void of some repetition.

Under every physician's care have come cases of Acne, Psoriasis, Eczema, Urticaria and Furunculosis, etc., as illustrated here; error in diet is commonly at fault. We can agree with the author, "That the sooner and the more thoroughly the thought, and attention, and work of those engaged in this branch of medicine is turned from purely local pathology and treatment, to the consideration of the deeper and fundamental elements of tissue disturbance from internal causes, the better it will be for science and for the practical relief of sufferers from many diseases of the skin."

A short space is also herein given to hygiene in relation to skin diseases as well as prescribed diets.

We can commend this little book as a pointer to the profession on a heretofore neglected subject.—W. A. Q.

A MANUAL OF PRACTICE OF MEDICINE. By A. A. STEVENS, *AM., MD.*, Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania.

Ninth Edition, Revised. 12mo of 573 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Flexible Leather, $1.50 net.

This book has been before the profession for twenty years. That it has survived so long and now appears in a 9th edition may be taken as evidence that it has unusual value. Not every practitioner can spare time to wade through many pages of a large work for a little information. In this book the busy man can quickly get at the essentials, and hence it will be found a valuable book to keep in a convenient place, or to carry in the obstetric bag on a long trip to the country with the prospect of hours of weary waiting for something to happen.

EPIDEMIC CEREBRO SPINAL-MENINGITIS. By ABRAHAM SOPHION, M.D., formerly with the New York Research Laboratory, 23 illustrations. C. V. Mosby, St. Louis. $3.00

The author, with whose name as a medical writer we are not familiar, has evidently had abundant opportunity for both the laboratory and clinical study of the disease of which he writes. The book details the laboratory methods of study, and also gives much practical information drawn from large experience at the bedside, as to the therapeutic management of the disease, and also its sanitary control. Hence, it is not only valuable to the practitioner but the sanitary official as well. Both will here find more fully than in any other single publication facts of interest and practical value. No other monograph has appeared in our language on this subject.

DISEASES OF THE SKIN AND THE ERUPTIVE FEVERS. By JAY FRANK SCHAMBERG, M.D., Professor of Dermatology and Infectious Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Second edition, revised. Octavo of 573 pages, 235 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, $3.00 net.

We took occasion, when the first edition of this book appeared to give a favorable notice of it. We do not note any material change in this edition. The descriptions of diseases and their treatment are brief but clear. Most of the works on skin diseases are too full for the general practitioner for whom this book is especially valuable. The illustrations are exceptionally fine. The physician ought to be able to diagnose a case of smallpox and a number of other diseases from these pictures alone. We find ourselves frequently referring to this book in preference to a number of other larger works in our library. We therefore highly commend it.

CHLORIDE OF LIME IN SANITATION. By ALBERT H. HOOKER, technical director Hooker Electrical Chemical Co., New York. J. Wiley & Sons, 1913.

In this book are presented very fully the modern methods of purifying drinking water by the use of chloride of lime; also its use in sewage disinfection, street sprinkling, etc. Full directions are given for its use in epidemics, for sterilizing bandages for use in surgery, and for use in various ways on the farm. The physician, sanitarian, the farmer, in fact any house holder may here find much valuable information as to the use of this chemical which is known to all as a most useful disinfectant.

THE CAREER OF DR. WEAVER. By MRS. HENRY BACKUS. Cloth, Pdice $1.25 net pp 379, with illustrations. Boston, L. C. Page and Co. This is a novel with two doctors, brothers, as prominent characters. Dr. Weaver runs a private hospital, seeks patronage by means not altogether ethical, loses sight of the highest ideals, and grieves his brother, Dr. Jim, the real hero of the book, whose admonitions finally rescue the elder physician from an impending downfall, and turn him into a better course of life. Many problems of professional interest are touched on, and some of the faults of some doctors made prominent, e. g. fee splitting, self-advertising by doubtful methods, etc. That a woman and a lawyer's wife—as the writer is said to be—should show such intimate knowledge of things medical as is displayed in this book is marvelous. She must have had a doctor for counsel., surely. The book can be read with interest by every physician

THE WASSERMANN REACTION. by J. W. MARCHILDON B.S.M.D., Assistant Professor St. Louis University-Medical School. Eleven illustrations and colored frontispiece. C. V. Mosby Co., Publishers. Copyrighted, 1912.

This little work, consisting of one hundred (100) pages, takes up in a concise, scientific, and practical way the technique and practical application of the Wassermann Reaction in the diagnosis of syphilis.

I have never seen a more comprehensive work on the subject. It is not only indispensible to the man who is doing the Wassermann Reaction but it is also of inestimable value to the general practitioner who is anxious to keep abreast of the times R. U. DRINKARD, M.D.

Medical Outlook

TONSILLITIS AND ADENOIDS IN RELATION TO OTHER DISEASES.

Review of 200 cases—Chas. . F. Lewis, M.D., Austin, Minn. in Journal Lancet.

Lewis says: "Ninety per cent. of underweight patients suffering from chronic tonsillitis show immediate improvement and sometimes remarkable increase in weight following enucleation of tonsils. I believe in eucleation of the tonsils in the majority of cases ;tonsillotomy may do in some; in fact I have seen good and permanent results in properly selected cases. For adenoids I like the Gottstein or similar curette method and special adenoid forceps, but all to be used with the finger as a guide. Remove them early in every case when indicated and results will be most gratifying." G. D. L.

THE DIAGNOSTIC VALUE OF THE CUTANEOUS TUBERCULIN TEST OF v. PIROUET.

In the *American Journal of Diseases of Children* for July, 1912, WACHENHEIM states that the conclusions to be derived from his data are as follows:

If 95 per cent. of all more or less run-down children give a negative reaction, a positive reaction in the small remainder becomes highly significant. Even an older child that responds to the cutaneous test should be regarded seriously, and by no means as one of the common run; an energetic anti-tuberculous phophylaxis should be promptly initiated, and the patient should be guarded, so far as possible with our somewhat limited resources against the recrudescence of a disease which it is safest to regard at the best as latent, and by no means extinct.

Our acquaintance with the v. Pirquet test is too brief to inform us as to the relative frequency of active tuberculosis after adolescence, in individuals who seemed fairly healthy, but reacted positively to the cutaneous test in childhood. The positive determination of the tuberculo-anaphylactic state is therefore of the greatest diagnostic value, and should make our remote prognosis extremely guarded.

PRENATAL OPHTHALMIA.

W. A. N. Dorland, Chicago (*Journal A. M. A.*, October 14), reports a case of a very rare or almost unique case of gonorrheal ophthalmia in a fetus in utero. He has found no other published case and has not seen the possibility noticed in the text-books. The condition at birth was so virulent that the child had to be at once isolated from other babies in the hospital. Dorland says it could occur but one way, since the mother denied all vaginal douching prior to delivery. Her own freedom from gonorrheal puerperal fever was due to the fact that the infection had occurred within the amniotic sac and was limited to that cavity without penetration to the dicidual tissue.

EARACHES.

An earache is always important and should never be disregarded as a trivial thing, to be handled with oils, poultices and various lotions, whether they are prescribed by members of the family, or as is too often the case, by the doctor himself. Too often, when the physician's attention is called to an earache, he tells the mother what to do, but fails to examine the ear. The reason for this is that relatively few practitioners know what they see when they look into an ear.—*G. L. Richards in Merck's Archives.*

EPILEPSY IN INFANCY

Marchland calls attention to the occurrence during infancy of convulsion without any apparent cause and without prodromes, which are not accompanied by any other morbid manifestations, and which do not seem to affect the general health. In these cases which are of an apileptic nature there are probably present cortical lesions which may have begun during intrauterine life.—*Gazette des Hospitaux.*

DUODENAL ULCER IN INFANCY.

In recent years duodenal ulcer has been reported much more frequently in proportion to gastric ulcer. In infants a considerable number of cases has been reported. Entz reported eleven cases in 364 autopsies at the Budapest Children's Hospital in 1908. The ages were from six weeks to six months. It is seldom diagnosed during life. Flesch gives the history of a case diagnosed during life from the profound anemia and bloody stools. The child had been fed first milk and gruel, then the milk had been given up entirely. The lack of salts and the inanition caused by the improper feeding led to injury and finally to autodigestion of the duodenal mucous membrane.

BORCHER'S: ENUCLEATION OF THE TONSILS WITH THE FINGER.

Munchen. med. Wchnschr., 1912, lix, Oct. By Surg., Gynec. & Obst.

Borchers uses ,ethyl chloride as anaesthetic with the drop method. He operates during the analgetic stage, which is reached within two minutes. The reflexes should be present to avoid aspiration of the blood. The head is slightly elevated and somewhat to the side. The anterior pillar is detached by a curved elevator. If adhesions are present, curved scissors and forceps are necessary. After detachment of the anterior pillar, the enucleation of the tonsil from its bed is performed by the index finger. This is done by stripping in an upward and downward direction. A few seconds, as a rule, suffice to finish the procedure, so that the tonsil is held by a thin pedicle passing in the direction of the base of the tongue. This pedicle may be torn off in children ;in adults detachment by scissors is advisable. The operation can be done by touch alone ;eye control is not necessary. The patient is allowed to come to and rinse his mouth before the second tonsil is removed.

The author cites as advantages of this method, its simplicity, short duration, the slight hæmorrhage, and impossibility of injury to either anterior pillar or carotid artery if abnormal in its course. Very small tonsils, especially very soft ones and those which are closely adherent, should not be removed in this manner.

F. C. RIEBEL.

SOME UNTOWARD AFTER-EFFECTS OF TOO RADICAL TONSILLECTOMY.

J. A. STUCKY, *The Laryngoscope*, October, 1912.

The author does not believe that complete tonsillectomy should be advocated, as a routine procedure. It should be regarded as a major operation ,and as such should be performed in a hospital. In the majority of the cases there is more or less injury done to the pillars of the fauces. Also some shreds of muscular tissue are usually cut or torn off.

The author saw a case of facial paralysis after this operation, lasting for five weeks. Impairment of the voice, especially of the high tones, is frequent. In two cases the pillars of the soft palate were out of alignment due to cicatrical contraction, causing tension and interference with palatal movements. In three cases the uvula had been caught in the loop of the snare and removed. In two other cases there was a loss of tonicity of the tensor palati and levator muscles which resulted in the regurgitation of fluids through the nares lasting for several weeks.

There was one case of fatal hemorrhage a few hours after the operation; two cases of cellulitis involving the entire neck; and nine cases of secondary hemorrhage where it was necessary to tie a spurting vessel or plug the space between the pillars and sew the pillars of the fauces.—*American Journal of Surgery.*

RECURRENCE OF ADENOIDS.

T. Guthrie, in *The Lancet,* states that the most important factor in the recurrence is the age of the child. In children under four years of age there is decided risk of recurrence; between the ages of four and seven the chances of recurrence are slight, and after the age of seven they are practically *nil,* always provided that the operation has been complete. Apart from the influence of age, it is certain that recurrence is much favored by an attack, within a short time of the operation, of one of the specific fevers, especially measles or whooping cough. Again, according to C. Parker, in children who are the subjects of congenital syphilis recurrence seems to be the rule rather than the exception, unless the general condition is carefully treated. Lastly, recurrence is probably favored by the presence of untreated anterior nasal obstruction, especially hypertrophic inferior turbinals, and is therefore apt to be met with in patients with high arched palates and narrow nasal cavities, in whom removal of the adenoid does not lead to the establishment of free nasal respiration. All of these conditions have the feature in common that they tend to excite or maintain a state of chronic post-nasal catarrh, which should, therefore, wherever it is present, receive appropriate treatment if the risk of recurrence is to be reduced to a minimum.

PASTEURIZATION.

The higher the temperature at which milk is heated, the greater are the changes in its composition. While it is somewhat problematical how much influence these changes have on the development and well-being of the infant, it is the part of wisdom to avoid them as far as is consistent with the attainment of the object of cooking milk, that is, the destruction of pathogenic microorganisms. Pasteurization is therefore preferable to boiling. The temperature of the pasteurization should be, moreover, as low as is possible. Pasteurization at 140 F. for twenty minutes is efficient ;lower temperatures are not. This temperature and time are, therefore, the ideal ones. At this temperature there is no change in the taste, odor or color of the milk, no noteworthy changes in the chemical composition are produced, the ferments and bactericidal action are unaffected and bacterial toxins and non-spore-bearing microorganisms are destroyed.

It is not necessary to have any special apparatus for the pasteurization of milk in the home, as any dish of sufficient size and depth will do. Each feeding should be placed in a separate clean, boiled bottle. The bottle should then be tightly stoppered with non-absorbent cotton and placed in a pail or dish of cold water, the water in the dish being at the level of the milk in the bottle. The dish should then be placed on the stove and heated until the thermometer, suspended in the water, reaches 145 F. The dish and its contents should then be taken off the stove and covered with a blanket. It should be allowed to stand for thirty minutes. The bottles should then be taken ou, cooled quickly, preferably in running water, and kept in a cold place until used.—Morse in Journal American Medical Association.

INFANT FEEDING.

The principles of infant feeding as carried out by Finkelstein and used in the dispensaries of the United Jewish Charities, the Franklin Street Settlement and the Salavtion Army in Detroit are described by D. J. LEVY, Detroit (*Jaurnal A. M. A.,* June 22). They are: "(1) milk dilutions instead of percentage formulas. (2) long feeding-intervals; five feedings in twenty-four hours, four hours apart; (3) mixed carbohydrates; the addition or 10 gm of flour and the use of oatmeal water as diluent: maltose dextrin as sugar; (4) limiting the total quantity of milk mixture to 1 liter (1 quart) a day; (5) the employment of broths, fruits and vegetables from the sixth month on." The least intelligent nurse can prepare a proper milk mixture, and the longer feeding intervals give rest to the mother and induce regular habits in the child. Breast nursing should never be given up until it is absolutely necessary. Levy thinks that when that occurs it is better to give one-half milk instead of one-third and increase it two-thirds milk after the first six months of life. The employment of broths and fruits and vegetables in the infant's diet is usually not sufficiently emphasized.

BUTTERMILK AS AN INFANT FOOD.

This subject is considered by NEFF in the *Journal of the Missouri State Medical Association* for October, 1911.

He does not believe that buttermilk should be considered as a substitute for sweet milk in the feeding of healthy infants.

His experience proves to him that the cases for the feeding of buttermilk as for any other form of milk should be selected, and that the daily weight and other evidences of gaining should be closely watched.

Buttermilk is more especially suited to sick infants, those with marasmus, chronic enterocolitis, exudative diathesis, and those that are commonly termed difficult feeding cases.

It may be given for a period of several months without causing unfavorable symptoms, and top milk may be gradually added if desired.

It is especially valuable in the summer months, at which season it will be better tolerated and will produce better stools than the same case would have done on a sweet milk mixture.

Chilling and proper handling of a clean fresh milk is essential to the successful administration of, and good results in, buttermilk feeding.

INFANT-FEEDING.

T. H. COMROE, York, Pa. (*Journal A. M. A.,* November 30), pleads for longer intervals in

infant-feeding, especially by the general practitioner. Among pediatrists ,as shown from an inquiry made by him, the tendency to longer intervals is almost universal, but the text-books still hold to the old figures of every two hours for the first month, gradually increasing to two and a half until the third or fourth month, and thereafter every three hours. It is apparent that overfeeding is one of the most common causes of infant nutrition disturbances. He reviews the literature as to the time required for emptying the stomach and finds that about two hours in breast-fed infants and about three hours in bottle-fed infants ,or perhaps a little longer is the general rule. Hence, too frequent feeding is not physiologic. The objections to long intervals are more theoretical than practical. His clinical observations, in common with those of others, are that the average normal child fed at longer intervals is able to ingest a larger quantity of milk than is usually prescribed and invariably does so. Time and the resulting rest are absolutely essential. His own experience of longer interval of milk-feeding has been good. It has been his usual custom to recommend three-hour intervals for healthy babies of the average normal weight, allowing seven feedings in the twenty-four hours, including one night feeding. The breast babies are permitted to nurse until they are apparently satisfied, though usually a maximum of twenty minutes is prescribed. During the second and rarely later than the third month, allowing for the digestive capacities and weight curve, four-hour intervals are ordered, permitting six nursings a day for the first one or two months, and five later. The advantages of long intervals in well selected cases are numerous. Digestive disturbances are almost totally absent. Regurgitation is reduced to a minimum and vomiting is rare. The dreaded constipation and colic are far less frequent and the weeping eczemas from gastro-intestinal intoxication are seldom seen. The appetite is better and the child has longer intervals of sleep. Another and not slight advantage is the lessened temptation for mothers to forego breast nursing on account of social or domestic requirements. Comroe does not offer any special method of breast-feeding as a routine, but advocates ,in general, longer intervals.

INFANT FEEDING.

By Dr. Jules M. Brady, in *Interstate Medical Journal*, July, 1912.

Discussing the subject of infant feeding as taught by the German school, the author points out that the intervals of feeding advised in Germany are at variance with those usually recommended in this country. The coagulation of milk begins within two or three minutes after it reaches the stomach, and is completed in ten minutes. The whey passes at once into the intestine and leaves the solid curd behind. The periphery of the latter is then attacked by the gastric juice; after three hours, in the case of cows' milk, the stomach has emptied itself; in the case of mother's milk, after one and a half or two hours. If more milk is taken into the stomach before it has emptied itself, the later milk flows about the curd already present and forms layers around it. Thus, if milk is ingested regularly at short intervals, the nucleus of the curd remains undigested indefinitely. It is therefore apparent that the intervals should not be less than three hours, particularly in the artificially fed. Czerny and Keller recommend five feedings in twenty-four hours, even for young infants. The amount of each feeding must, however, be large,—3½ ounces in the early weeks.

For a healthy infant, throughout the first year, the author is of the opinion that the percentage of proteid used need not be small, and may range from 1.50 to 3.00. Particular attention must be paid, however, to the fat, which must be increased only when the infant is thriving, and should range between 1.00 and 3.50 per cent. Maltose is to be preferred to lactose on account of its favorable effect on the weight and the fact that it is less liable to bring about an intoxication —the "alimentary intoxication" of Finkelstein, the symptoms of which subside immediately on withdrawing this sugar from the diet.—*Journal Nat. Med. Soc.*

GASTROINTESTINAL CONDITIONS OF NURSLINGS, MERCURY IN TREATMENT OF.

In a series of 200 cases, the author found that, in 35 to 40 per cent., bi-chloride of mercury, administered to the nursing mother in doses of 1-32 grain (0.0002 Gm.) three times a day, had a decided influence upon the gastrointestinal condition and nutrition of the infant. Vomiting, when not due to over-feeding or organic disease, ceased as a rule within twenty-four hours after the treatment was begun ;diarrhoea was always markedly improved, the frequent, foul-smelling stools containing undigested curds, being rapidly replaced by the normal ones. Constipation was in like manner improved by diminishing or increasing the amount of mercury given to the mother. Colic was benefited and the weight was improved in many cases.

This treatment is indicated in any gastrointestinal disturbance of the nursling. It is a harmless procedure even where no benefit results. The effect of the drug upon the non-syphilitic mother is practically nil, while in the syphilitic mother it improves the general condition.—S. V. HAAS, (*Archives of Pediatrics*, July, 1912).

STERILIZATION OF MILK.

J. L. MORSE, Boston (*Journal A. M. A.*, March 22), says that the term "sterilization" should never be applied to the processes used in the preparation of infant's food, as they do not render the milk bacteriologically sterile. He describes the changes produced in milk by heat, in appearancey, taste, smell and composition. Changes in taste and smell are not usually produced at less than the boiling point, but heating to 150 F. or over materially prevents the rising of cream. In boiling there is a precipitation of the calcium and magnesium salts, the organic phosphorus is decreased and the inorganic increased, and about one-third of the citric acid is precipitated in the form of tricalcium citrate. About 90 per cent. of the carbon dioxid and 50 per cent. of the oxygen

and nitrogen are also driven off and there is a does not cause noteworthy changes in the compounds of casein and its base. The soluble albumins are precipitated. These are the findings of Rosenau, Pfaundler, Schlossmann and Sommerfeld. Heating milk to 149 F. for thirty minutes does not cause notworthy changes in the composition, and the precipitate reaction is not diminished by even an hour at 248 F. It has been shown that the typhoid, diphtheria, dysentery and cholera germs, as well as other pathogenic organisms, are destroyed by heating to 140 F. for twenty minutes. The spore-bearing organisms are more resistant and the toxic products of bacterial growth are sometimes rendered inert and sometimes not. That of the colon bacillus is unaffected at 272 F. The lower animals do better when fed on raw than cooked milk of their own species and babies react similarly. There is, however, little relative evidence as to the ill effects of cooked milk as a food, either in the production of rickets or scurvy, though the evidence seems a little stronger as to the latter. Other factors must be excluded, however, and more extensive observations are required. The assertion that cooking milk "devitalizes" it is not altogether credited by Morse, who considers it at least not proved, and he advises cooking milk as a routine practice for the destruction of injurious germs, even if it does not affect the digestibility. Pasteurization, using 145 F. instead of 140 as the standard, for twenty minutes, does not do away with the necessity of taking care of the milk and keeping it cold. The flash method of pasteurization is condemned. The method advised for home use is pasteurization in sterilized bottles placed in a dish of water on the heater and kept there till the thermometer in the water reaches 145, then taken out and wrapped in a blanket and allowed to stand for thirty minutes, then taken out and cooled quickly, preferably in running water, and kept in a cold place till used. There are several pasteurizing apparatuses for home use on the market, among which he mentions those sold by the Walker-Gordon laboratory and that designed by Dr. Freeman of New York. These are more convenient, but no more efficient than the simple method described.

Miscellany

Every child should have mud pies, grasshoppers and tadpoles, wild strawberries, acorns and pine cones, trees to climb and brooks to wade in, sand and snakes huckleberries and hornets, and any child who has been deprived of these has been deprived of the best part of his education.—Luther Burbank.

A VERY SMALL BABY.

Enclosed you will find photograph of a baby and its nurse. This baby-girl I delivered in this city February 11, 1912.

The parents have been married twelve years and this is their first child. The father is five feet, ten inches in height, and weighs 190 pounds. The mother is five feet tall; weight, 110 pounds. Both are of normal health.

The baby at birth weighed 1 pound and 6 ounces, but was a normal child. At two months of age it weighed 2 pounds, and now, at 6 months, it weighs 7 pounds and is in normal health.—Dr. Clemens of Dayton, in *Jour. Clin. Med.*

SEX INSTRUCTION IN SCHOOL.

P. Zenner, Cincinnati (*Journal A. M. A.*, February 1), gives an account of the later results of a course of instruction in sex hygiene given some five years ago in one of the Cincinnati schools. The school was in a slum district where the children were exposed to demoralizing influences and the moral tone was low. The immediate results were to make the scholars more cleanly and decent, and the influence also extended to the homes. Many parents came to the school to thank the teachers for what had been done. Four and a half years later, when the members of the class had become young men and women, Zenner requested the teachers to look up their records and present condition. Between one-third and one-half of them could be traced and the good results were found to have been lasting. With one exception the girls have all been found to have led pure lives and kept their minds pure. While, as was to be expected considering their history and environment, the report is not so favorable with the boys, the number of them with good habits and clean lives is unusual and a much better showing than the average of young men. Zenner thinks that the record shows what can be done and is an argument for general adoption of such methods of instruction. He admits that home instruction in such matters is ideal, but it cannot replace that in the school, and the notion of delaying such knowledge in children is futile. If they cannot have proper instruction from proper sources they will have it from evil sources and of a perverted kind. School instruction itself, if improperly done, may do harm, and the method he suggests to meet all possible objections is as follows: It applies to class instruction. "The lesson in each instance should be a prepared one. The teacher, whether school teacher, physician or any other, should recite it to the assembled parents, with possibly the superintendent, a physician or other supposed expert in the audience. Only if it be satisfactory to this gathering should the lesson be given to the class. Such a procedure would have various advantages. It would be a reasonable assurance that the teaching would do no harm. It would remove the antagonism of the parents to such instruction, which is now its chief stumbling-block. The teacher might receive suggestions from the audience which would help him to make the lesson more valuable. Finally, the lesson might be a great source of instruction to the parents, often enabling them to teach their children rightly at home." Zenner says the public discussion of sexual matters is not without its possibilities of harm, but the greater danger of silence justifies it. If we can by instruction of the young lessen the great menace of social disease as well as help to create higher ideals there will then be no more need of so constantly bringing these matters before the public.

NOTES ON A CASE OF PRECOCIOUS DEVELOPMENT IN A BOY, AGED SIX YEARS.

Williams (*The British Journal of Children's Diseases*) mentions the case of a boy of six years old because the parents noticed that during the past six months he was developing quickly. He had a slight moustache, and a deep voice, like an adult's. Muscles and trunk were well developed; and he could lift heavy weights. His intellect and movements were slow. Some inclination to knockknee; and the tibiæ were slightly curved. There was an abundance of pubic hair; no axillary hair; external genitals fully developed. Otherwise the physical examination was negative. There was no sugar or albumin in the urine. Six months later there was increase of weight to 5 stones 5 lbs., 5 oz. (normal 3 st. 2½ lbs.); and according to skiagram advanced ossification of the small bones.

There have been about 22 cases of sex abnormalities in children with autopsies, which showed that the condition was associated with adrenal hypernephromata. Hypernephromata in children tend to grow slowly and do not all tend to be disseminated. There have been still other cases reported of precocity in children in connection with the pineal gland. There is some evidence in support of enlargement of the pituitary body in this case.—*Charlotte Med. Jour.*

PRECOCIOUS PARENTAGE.

Under the above heading *Clinical Medicine* for January, on page 102, referred to two cases of early pregnancy, one in a negro girl, nine years and twenty-four days, and one quoted after *The Lancet,* in a Chinese girl of seven. In an editorial note in *Clinical Medicine*, for June, 1910, page 678, there appeared a reference to a case of pregnancy, also in a colored child, nine years and twenty-four days old, which had been reported in *Clinical Medicine* for June, 1908, on page 708.

In delving among old files of *The British Medical Journal,* I came across an even more remarkable case because occurring in a Caucasian, which was first related in *The York Herald* (England) for October 19, 1881, and was reported to *The British Medical Journal,* 1904, Vol. 2, page 52. According to this account, a child eight years of age, living in Rillington, Yorkshire, England, was found pregnant in 1880 and was delivered of a male child in March, 1881. This is certainly a unique case for early pregnancy in a Caucasian, and still more especially in an Anglo-Saxon, and has, with one possible exception, never been equaled so far as I am aware.

It may be of interest to review the cases which have been collected by Kisch (Geschlechtsleben des Weibes," Berlin und Wien, 1904), whose book has recently appeared in an English translation. Kisch mentions the case reported by Molitor, delivery of a nine-year-old girl of a mole with embryo; the case of von Haller, pregnancy in the ninth year of life; *the case of Carus, pregnancy in a girl eight years old.* Casper has seen a girl in Berlin who had conceived when just twelve years old, and was delivered of a living child. Ruettel saw a nine-year-old pregnant girl. King delivered a girl who had not completed her eleventh year. Taylor reports the case of a girl twelve years and six months old whom he observed in the last month of pregnancy, and Koblanck reports that a 14-year-old girl was delivered of a child 4½ pounds in weight.

Except for the case of Carus it appears, then, than the one which I have cited from *The British Medical Journal* is the most precocious one on record.—H. J. Acard in *Am. Jour. Clin. Medicine.*

CERVICAL ADENITIS IN CHILDREN.

Royal Hamilton Fowler, M.D., Brooklyn, N. Y. (*Medical Record,* December 28, 1912), says this is a very prevalent condition in school children between the ages of four and ten years of age. It follows almost all the exanthemas of childhood, and may be due to any variety of infection other than tuberculous. The author considers the von Pirquet test to be most delicate and reliable in children, and advises its use. All cases of chronic cervical adenitis should be treated as tuberculous, even if it cannot be positively demonstrated as such. The tonsil is accepted as the most frequent site of entrance of the tubercle bacillus, yet in a series of a thousand cases of tuberculous cervical adenitis tuberculosis of the tonsil was present in only 2½ per cent. He has proven that a tonsil swabbed with a culture of tubercular bacilli does not in the majority of cases itself become infected, but that the glands which drain it do become the seat of a tuberculous infection.

In chronic cervical adenitis he treats the seat of infection, and if unable to locate this he treats them as if tuberculous, using appropriate hygienic methods for three months. If suppuration occurs during this period he incises and drains; if they resist treatment for this time, he advises excision. This should be preceded, however, by removal of the tonsils and adenoids. In selected cases he uses tuberculin.

PNEUMOCOCCUS MENINGITIS.

J. M. Brady, St. Louis (*Journal A. M. A.,* March 29), reports a case of cerebrospinal meningitis in a child 1 year old in which the exudate showed the pneumococcus, but in which the cerebrospinal fluid was sterile throughout. A similar case is reported by Holt (*Am. Jour. Dis. Child.,* January, 1911, p. 26). Brady remarks (in regard to the dictum of Dunn that the lack of examination of the cerebrospinal fluid renders a positive diagnosis of meningitis unjustifiable) that we must admit that only positive findings are conclusive The character of the pseudomembrane covering the brain may be such as to prevent the cerebrospinal fluid revealing the actual condition. He considers the following statements justified: "1. The positive diagnosis of pneumococcus meningitis may be impossible during life. 2. A normal cerebrospinal fluid may be obtained throughout the disease. 3. Anatomic changes (encephalitis, meningitis) occur oftener than usually believed and are the explanation of symptoms from the side of the nervous system which we have regarded in the past as functional (meningismus)."

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Original Articles

PRESIDENT'S ADDRESS

By Frank Le Moyne Hupp, A.M., M.D.
Wheeling, W. Va.
President West Virginia State Medical Association.

(Delivered at Annual Meeting in Charleston May 21, 1913.)

To His Excellency Governor Henry D. Hatfield, surgeon, diplomat and peacemaker, to the many members of this West Virginia Medical Association whom I have seen personally and with whom I have corresponded regarding our beloved institution's welfare, and whose helpful suggestions, cordial interest, and wise counsel were freely given, I acknowledge my gratitude, and to you, members one and all, I dedicate this my address.

To be the titular head of a society of nine hundred trusted and tried men of the profession of medicine in this Commonwealth of West Virginia, I regard as the highest distinction, and my gratitude and appreciation gentlemen, are profound and from the heart.

I would rather look upon this honor as having come to our Ohio County Medical Society, than to myself, because from its ranks have arisen many worthy men in medicine who have gone to their reward, men, I am sure, who have the homage of your profound admiration.

It is to these illustrious fathers, a few among them founders of this Association, that I wish to transfer this high honor you have seen fit to give me, with all humility and reverence, as a recognition of their work in medicine, for verily, "In the continued remembrance of a glorious past, individuals and nations find their noblest inspiration."

The position carries with it the greatest responsibility and obligation; but it is pleasant and comforting to reflect that this responsibility has been shared by the other officers and members.

Difficult indeed is it for the presiding officer of this society, without the untiring co-operation of its fellows, to maintain the high and honorable traditions of its forbears, for what they found glass and made crystal, we have solemnly obligated ourselves to receive crystal and make pearl. *(Fuller.)*

Like the craft, so beautifully described by Sir James Barr, our good ship, has also sailed through troubled waters in the past, but she has been so piloted by my illustrious predecessors that no cruel icebergs have torn her vitals.

Today, even though buffeted by threatening waves, she has anchored here in Charleston's harbor, perhaps heavy with a few barnacles, but, thank God, with her bulkheads secure.

In offering a few simple suggestions for your consideration, your presiding officer will endeavor to avoid, if possible, a state of mind which you might see fit to demarcate as a shadowy step from the insane, or which might either sink into pessimistic philosophy, or explode in fanticism.

Medical Economics. There has recently been incorporated in the State of New York, The American Society of Medical Economics.

The father of this important institution, and its first president, Dr. E. Eliot Harris, in opening his very able paper which lead to its formation told the members of the necessity for a careful reconsideration of the duties and obligations of the men of medicine to the public, and the public to the medical profession, how all this is evident because of the lack of reciprocal co-operation to alleviate the hardships which both have too long endured.

Certainly the public has a right to look to our profession for light and guidance concerning public health and hygiene.

I would recommend that a committee be appointed annually, on Medical Economics to confer with President Harris or Secretary Hubbard of the American Society, in order that we may better understand this all important subject, perhaps by affiliation with this society or officially bringing to the attention of this Association in some tangible form the exposure, and the suggestion of a remedy for, fee splitting, lodge and contract practice, the advertising charlatans, abortionists, anti-vaccinationists, anti-vivisectionists, remedy vendors, food adulterations, and exponents of freak religious systems.

The elimination through even more rigid examination, of the undesirable and unprepared candidates for a medical license.

"To aid in the enactment of legislation which shall provide for the revocation of any license to practice medicine or any license issued by the Examining Board for causes such as fraudulent advertising intended to impose upon or deceive ignorant or unsuspecting persons."

This committee on medical economics shall "survey and study all matters that can be practically applied, for the benefit of the public health, the betterment of the economic condition of the practicing physician and of the profession of medicine." (*Harris.*)

"Its duty shall be to investigate and take appropriate action in regard to the practice of all licensed physicians, whether they may be members of this society or not in so far as the same reflects unfavorably on the profession or the public."

"To co-operate with other societies with the object of establishing certified pharmacies where prescriptions may be filled with pure and standard drugs as ordered. Illegal counter prescribing to be cared for in the certificate."

I would have this committee co-operate in every possible way with the State Board of Health, supporting the honorable traditions and strengthening the right arm of that exalted medical institution, in its efforts for adequate appropriation and other imperative questions for the good of the profession and the welfare of humanity.

I would recommend that this new committee on medical economics prepare and present a strong resolution at our next meeting on the segregation of the indigent feeble minded of our State, and take up also the subject of the crying need for a colony for epileptics.

The personnel of this, probably the most important committee of our State Association should be made up of resolute men who are not afraid of responsibility, men willing if need be to sacrifice time and the days earnings, who are willing to take the bit in their teeth and travel to the four corners of the State for the guardianship and honor of the craft, and the betterment of their brother man.

Did I hear some one speak of a heathen sect known as Christian Science?

Gentlemen, the very mention of Eddyism is enough to curdle the blood of every true follower of Aesculapius.

The lamented Algernon Thomas Bristow* once upon a time told the story of a little child who had died of diphtheria after one "present" and several "absent treatments" by the Christian Science masquerader. The deluded mother stated that the little child had been "in error." By error she explained, she meant a "slight sin."

In other words, this strange sect teaches that the Judge of all the earth will slay a five-year-old child for sin.

Has heathendom ever evolved a more savage doctrine?

It is akin to the terrible belief once taught that hell is paved with the skulls of unbaptized infants.

"And these rivals of the Witch of

---

*Bristow, *N. Y. State Journal*, Dec. 1911.

Endor," writes Bristow, "flourish exceedingly, fatten on the blood of their innocent victims and go unwhipped of the law, because they call such a doctrine religion, and Justice keeps her sword in its sheath and smiles benignantly, if not inanely, on the lawless practices of this sect, because of the cloak of religion with which its votaries sanctimoniously cover their nakedness."

Eugenics. Regarding eugenics, a medical address in these times would be a poor effort indeed, if this all absorbing topic were omitted.

The medico-lay opinion has scarcely had time to crystalize on this question of the burden of heredity. Certainly the writer can lay no claim to its scientific study, but would recommend that a searching investigation be made by a committee made up of two or more of the members connected with our state hospitals for the insane, to report in the form of a symposium with full discussion at our 1914 meeting.

Dr. Goddard, director of the training school for feeble minded in Vineland, N. J., in his essay on Social Investigation and Prevention puts it this way: Three hundred thousand people in the United States are feeble minded; five hundred thousand have not sufficient intelligence to manage their own affairs; still a larger number have not sufficient will power to force themselves to do the right thing when it is pointed out to them.

The dangers to the public from the feeble minded and from those strange cases of Huntington's chorea, are well known and how through heredity it all spells degeneracy, criminality, prostitution, vagrancy and other social misfits, while the propagation of their breed, need not be dwelt upon before an audience of this kind.

The question should be squarely faced by the profession in this state and through legislation, as speedy as possible, adequate accomodations for such persons be made.

I would recommend that special attention be paid to the sterilization of the unfit. By unfit I mean consumptives, epileptics, hopelessly insane, incurable inebriates, and criminals.

I would have this important committee take up the subject of immigration and tell this society why, in New York State in 1908 the admission of foreigners to the insane hospitals numbered two thousand five hundred and forty-eight, practically half of the whole number admitted; and why only three hundred and eighteen aliens were excluded because of mental defect out of nearly a million coming to out shores in 1911, and how of this million a thousand found their way into the psycopathic wards of New York State institutions during the same year.

This committee should look into the wisdom of granting of certificates of health to those about to marry, a certificate indicating freedom from venereal and mental disease. The subject of education in sex hygeine should receive attention and the removing of the ban of professional secrecy regarding social diseases.

Some mention might well be made about the God-given privilege of womankind to say what is to become of her body after marriage, whether blindfolded she is to be sacrificed on the altar of man's early indiscretions, as Robinson has observed, making the wedding march a prelude of the funeral march?

Gentlemen, as guardians of the health, this responsibility is ours; with a calmness and a judicial balance, let us do our duty; "divided and scattered responsibility, is the hookworm that will gnaw at the heart, and the sinew of our medical commonwealth," and may God Almighty and the lay public not charge us with the sleeping sickness of indifference when it comes to facing these living problems.

The Cancer Problem. Of all the sciences, I believe it cannot be gainsaid, that medicine has been the most rapid in its development; surgery especially has advanced by phenomenal leaps, as with every operative procedure is afforded the indubitable proof of the correctness or error of the pre-operative diagnosis.

While this may be true, and because of it all we too often are inclined to receive the plaudits of the enthusiastic and ever grateful public and throw the traditional violets at our own feet. We must know and feel and acknowledge that there is a disease that has baffled our skill and crushed our pride, and that is cancer.

The ravages of this unconquered vampire is no new theme, for the literature of India two thousand years before Christ makes bold to suggest a remedy; while the father of History, Herodotus, tells the strange story of a Persian slave who cured Atosa, the daughter of Cyrus.

If we are to believe the "bookkeeping of humanity" we will place this scourge in the front rank among the major destroyers of human life.

Why need we apologize for again bringing this vital problem to your attention when we know that the death rate from cancer has jumped 31% in the last decade and when it is a matter of knowledge, gentlemen, that eighty-five thousand Americans will die this year from the withering sting of this viper?

The great propaganda for the prevention of this disease, especially in its worst forms, makes it necessary for us to no longer oppose taking the public into our confidence, so that through the press, and by educational talks, they may heed the warnings coming with the first signs of this disease.

Too often we see it in its advanced stages. The early symptoms must be known by the people, and written in letters so large, and language so certain, that he who runs may read.

It is a fact to be lamented that in this country only twenty-five per cent of the uterine cancer cases are helped against sixty per cent abroad.

I would have this Association take up the resolution submitted to, and unanimously passed by, the Clinical Congress of Surgeons of North America last year and indorsed without reserve in this month of May at the recent meeting of the Congress of American Physicians and Surgeons, in Washington, which is as follows:

"Be it resolved, That the time has arrived when, if the surgeons of America are to do their duty to the citizens of their country, a campaign of publicity should be at once undertaken to bring to the attention of every woman in the land the early symptoms of cancer of the womb and to point out that if the cancer be detected in its early stages it can often be cured.

"Be it further resolved, that this society at once appoint a committee of five, to disseminate this information.

"And, further, That this committee be instructed to write or have written articles to be published in the daily press, the weekly or monthly magazines, as may prove most expedient.

"And, further, That they report their progress for the year to the next annual meeting."

The State Tubercular Sanitoria. The crying need for the adequate maintenance of these institutions should be impressed upon the law-makers of this Switzerland Commonwealth of America, with all the force of an avalanche, by this body, made up as it is, of the guardians of the State health.

*Listen! Of 6,565 families that sought aid because of poverty, from the New York Association for Improving the Condition of the Poor, 1,605 were because of illness, and the illness in 555 families was tuberculosis.

Of the 29,460 cases registered at the Health Department of New York 5,053 were homeless.

It seems to me that, if this disease is the cause of the destitution, not measured in tears and woe, but in God-forsaken poverty to the extent of 8%, why in the name of justice, brotherly love, humanity and a state wide economy should this subject not be faced on its merits, lest we have "Devouring pestilence hang in our air." (*Richard III*, v-c.)

We do not want a little two-for-a-cent appropriation, for the anti-tuberculosis work in our State, for it has been demonstrated so far as hospital provision is concerned, that the demands of the tubercular, based on the needs and growth of our national population are increasing twice as fast as the supply.

We would do well to emulate the example of the State of New Jersey, which in its provision for hospital facilities has the most advanced and efficacious law thus far enacted by any state.

Knopf tells us that in arranging for the state care of these unfortunates, one of the newer conceptions in this anti-tubercular problem must be to multiply by eight

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*Knopf, *N. Y. Med. Record*, Feb. 1, 1913, p.

the number that have been claimed by death in order to know what we really need.

This means that in our own state we are harboring upwards of 4,500 tuberculars and in the City of Wheeling approximately 600 cases, many of them without the bare necessities of life, and most of them scattering the germs indiscriminately without guidance, law, or thought, and sowing the seed for future woe, poverty and death.

As an oasis in a dreary desert, we have in the City of Wheeling a well equipped tubercular dispensary managed by several members of this Association, who are teaching, healing and comforting and while hopeful and inspiring when compared with conditions of a few years ago, it is only a "drop of relief in an ocean of woe."

Do you ask why such a picture is exhibited before this Association? Because, gentlemen, it is our solemn duty to point the way for the people's law makers, to impress them with their responsibility in this matter, here in the capital city of Charleston, lest they forget their obligation to encourage, and sustain the institutions whose work is just begun at Terra Alta, Wheeling, and elsewhere, if they expect the plaudits, "well done," of their constituency.

A National Department of Public Health. *Dr. Samuel G. Dixon, commissioner of health for the State of Pennsylvania, recently asked these questions:

"Why is the Government spending millions for the protection of our forests and our coals?

"Why is it making strenuous efforts for the conservation of our water supplies and other natural resources.

"What is the object of hoarding all these treasures which nature has lavished upon us if not for the service of man?

Is it to the credit of our intelligence as a people that, while we give the guarding of these purely material interests a high place in our administrative scheme, we allow the man, himself, without whom all else is worthless, to remain unguarded by continuing to neglect to establish a National Department of Health to properly protect his life, health, and vigor, the greatest of all national assets?"

Tuberculosis alone, a preventable disease, now costs the Nation one billion dollars annually; typhoid fever is estimated by Dr. George Kober, dean of the medical department of Georgetown University, to cost over three hundred million dollars.

The conservation of human life, therefore, should be the grandest movement of the twentieth century.

The Nation is now allowing three million people to be constantly sick, and one million five hundred thousand to die annually.

Dr. Stiles, of the United States Public Health and Marine Hospital Service, has said that the United States is seven times dirtier than Germany and ten times as unclean as Switzerland.

He declares the lack of interest in preventive measures against disease is slaughtering the human race:

"Not long ago much was said about 'race suicide.' Is the real trouble in this country that not enough children are born or that too many are permitted to die?

"Is it 'race suicide' or 'race slaughter'? What real encouragement is there to the American mother to bear more children when the American father permits our country to be so behind the advance in science that we sacrifice over half a million American lives per year to preventable causes?"

I hope this Association will unanimously pass a resolution instructing the Counselors to communicate with our own Governor Hatfield and the Representatives and Senators in Washington indicating our unqualified indorsement of the Owens Bill and the establishment of a National Department of Public Health.

The State's Responsibility for Its School Children. This subject very properly belongs to the State Department of Education and Instruction, but it is certainly very near to the heart of the physician, as we are deeply interested in wise laws providing for the education of the young, their physical care, and well being.

In the City of Wheeling our Board of Education through its physician members,

*Southern California Practitioner.

devised and put into effect a medical inspection law which should be a model for every city and town in the Commonwealth.

Dr. Thomas D. Wood, Professor of Physical Education in the Teachers' College of Columbia University, has furnished the United States Bureau of Education the following figures, indicating that fifteen million children attending the public schools are in need of a physician's care; he says:

"Of the twenty million school children in this country, not less than 75% need attention today, for physical defects which are prejudicial to health and which are partially or completely remediable."

Several million children have two or more handicapping defects; four hundred thousand have organic heart disease; at least one million have or have had tuberculosis; about one million have spinal curvature, flatfoot, or some other moderate deformity; over one million have defective hearing; about five million have defective vision; about five million are suffering from malnutrition; over six million have enlarged tonsils, adenoids or enlarged cervical glands; over ten million have defective teeth which are interfering with health; and with all of this only about one hundred cities have organizations for the care of health in the schools.

In view of these facts I should like to see this Association add another duty to its committee on Medical Economics and that is to formulate a set of rules, to be submitted to the State Board of Education, relating to medical inspection of schools, and have it as near as possible like the rules now operative in the State of New Jersey which to my mind are worthy of being a model for the English speaking world.

A Free Dental Clinic. I should also like to see established in the large cities of our State a free dental clinic for the needy poor, certainly there should be no question as to the necessity of such a clinic when we stop to reflect that ninety-six per cent of the school children have decayed teeth.

Autopsy in Public Institutions. A controversy which arose in the lay press less than a year ago, uncovered some unpleasant facts regarding the unreasoning sentimentality of the public against autopsy work in the hospitals of this land of ours.

Dr. Theodore C. Janeway in his reply to Professor Newman points out the one firm foundation for successful diagnosis of disease is the proof afforded by post mortem, of every mistake made.

The percentage of post mortems among patients dying in our municipal hospitals is absurdly small as compared with other civilized countries.

In New York City many institutions have autopsies on less than ten per cent of their dead as compared with well over seventy-five per cent in foreign hospitals, and in Austria practically one hundred per cent.

Certainly it should be known by people of our own State that those of the doctors who cannot visit foreign institutions, or the larger hospitals of our own country, where pathological teaching is so well done must be wasting much of the skill and knowledge which they would possess, were this privilege extended at home.

Now then, the object of this preamble is to recommend the passage of a law which will permit an autopsy, in event of death, on every patient who receives treatment in a public hospital or asylum, provided it is the opinion of the attending physician that medical knowledge and humanity can thereby be benefited.

The West Virginia Journal. Because the West Virginia State Medical Journal is among the good medical periodicals published, we are indebted to the untiring zeal of the worthy editor.

Our Journal has long been one of the best, and it should be continued to be maintained so that it will alone be well worth the cost of membership in this Association. But remember, men, our Journal is just what you make it. Doctor Jepson can only be its editor, and it is your imperative duty to uphold the hands of the prophet, and give him your best support in an arduous and none too pleasant undertaking.

Even though it requires an additional outlay of money for the honor and standing of state medicine and for the good of us all, I would like to see the Journal enlarge its scope of usefulness.

The business cares it seems to me

should be removed from the shoulders of the editor as it has been in many other states, so that his undivided time may be devoted to the scientific and editorial department of the work.

I would further recommend a department of "Progress of Medical Science," with the appointment of a good man in the various specialties to edit and select material for his respective department.

This may add from fifteen to twenty pages of reading matter, and increase somewhat the price of the publication, but in so doing it will materially augment the value of the periodical.

Let the advertising material be selected with faultless care with the omission of all editorial and other comment. Let there be established a paying and constructive campaign for the readers of the Journal, but in no way in our emulative zeal wishing to destroy or forbid that which is good, or handicapping or abusing those advertisers who are endeavoring legitimately to give the profession of our State an all helpful service.

Medical Department of the West Virginia University. I am reluctantly constrained to bring to your attention a question that should be of the deepest concern to State Medicine. I refer to the national standing of the Medical Department of our State University.

I believe, gentlemen, that it is our solemn duty to petition Governor Hatfield and the Board of Regents or our West Virginia University to either raise the requirements for admission and place the curriculum on a higher plane or to abolish the Medical Department entirely.

At the present time the Institution which should be the pride of every member of this Association, occupies anything but an enviable reputation in the searching eyes of the Council of Education of our parent society, the American Medical Association: requiring as it does but one short year of work in an approved college of liberal arts as a passport, for admission to its halls of learning.

No school has the moral right to accept tuition fees from a student unless it can tell that student that its curriculum measures up to the standard of class "A" of the Council of Medical Education of the American Medical Association, otherwise it is little better than a diploma mill. This question should be referred to the new committee on Medical Economics.

A More Liberal Interpretation of the Reciprocity Law. I am in favor of either the creation of a new or a broader interpretation of the present reciprocity law by our State Examining Board.

The work of the Council on Education of the American Medical Association has just begun; the diploma mill will soon be a thing of the past; with the coalescence of the smaller schools, forming larger and better equipped institutions, and the elevation of the standard of medical education, an infinitely higher premium will be placed on the degree of Doctor of Medicine as given in this country.

Then, too, the examination of the Regents Board in the various states, our own state in particular, will have made the task of admission to the profession fold more and more difficult as it should be.

With all this it seems to me that the only test of fitness should be a hospital clinical, and laboratory examination, for physicians who have been regularly established in other states, and the presentation of their diploma, and certificates from the Regents Board of the State they have recently left.

Let West Virginia have a most rigid entry test, *but* with it a state wide reciprocity act; let our state be among the first to break away from this nefarious ruling and put aside the shackles of this "tyranny or democracy imparting as it does vexations of mind and pocket." (*Osler.*)

Should Delegates Be Ineligible to High Office. I sometimes doubt the expediency and wisdom of the by-law which forbids a member of the House of Delegates being elected to the higher offices, the gifts of this Association.

Some of the best seasoned professional timber is to be found on the floor of the House, and I fail to see the unwisdom of exalting any one of these men to a position of usefulness and honor, perhaps excluding the office of president.

Ex-Presidents to Be Members of the House of Delegates. I think I am voicing the sentiment of many of the members of this society, when I urge the House of

Delegates to pass a resolution which shall include in its membership the ex-presidents of this Association. By so doing much wise counsel, well seasoned and helpful suggestion may be added to the deliberations, to say nothing of this extended honor acting as an incentive to bring back to the meetings these men, rich in experience, and who have grown gray in the service of the profession.

An Extra Member of the Program Committee. The preparation of our program is of the greatest importance. There is a time honored custom that the president and secretary shall constitute the program committee.

I would suggest the addition of one other man to be selected by the presiding officer, and to be one of his own city, to co-operate with him in this work.

As it is now, it is a laborious task to make a state wide canvass for papers early in the year, only to have a veritable flood of literature washed to the door of the secretary's sanctum with the incoming of the eleventh hour tide.

An Abstract of Each Paper to be a Part of the Program. Several typewritten abstracts of each of the papers selected for the program should be required by the program committee, these abstracts to be forwarded to at least two men selected to open the discussion, thus insuring a measure of preparation on the subject at hand.

This practice has been adopted by many of the well regulated State Medical Associations and needs no argument here.

Such an abstract would look well as a part of the general program, lending to its dignity as a scientific document, to say nothing of greatly facilitating the general discussion.

Meetings of House of Delegates and Scientific Sessions Not to Conflict. The meetings of the House of Delegates should in no wise be allowed to conflict with the scientific sessions of the Society. The delegates come a long distance to attend this our annual post graduate school, and hitherto, because of an unfortunate arrangement, are often defeated in the very subject they have travelled miles to accomplish.

Quarantine Against Whooping Cough. I would have this Association recommend to the health officers throughout the State to placard all houses containing whooping cough as they would do if scarlet fever or diphtheria were present.

Any disease which kills ten thousand children annually, (*Hardy*) is certainly a serious one. Assistant Surgeon General Rucker has observed, in his public health bulletin that if bubonic pleague were to kill that many children in the United States in one year, the whole world would quarantine against us.

A child dead with whooping cough is just as dead as a child dead of the plague. A child whose body is weakened by disease is a potential economic loss to the Nation and the State.

Caustic Lye to Be Marked Poison. Perhaps nearly every man within my hearing has seen one or more cases of esophageal stenosis arising from the accidental swallowing of caustic lye.

*Chevalier Jackson has brought this subject with emphasis before the Section in Laryngology of the American Medical Association; he says:

"My reason for bringing this matter before the profession is the hope that some of you will take the matter up an see that the laws that compel the druggist to label corrosives that go into the medical chest, 'poison,' shall likewise compel the manufacturer so to label the corrosives that are infinitely more dangerous because they go into the kitchen.

Let this Association go on record as advocating a law forbidding the sale of caustic lye in any store within its confines unless bearing the poison label in at least four languages. The fact that at least four cases of poison from this source have come to my attention within the past four years is my very good reason for this recommendation.

The General Practitioner. A few months ago Forchheimer said, "The general practitioner is still the back bone of the medical profession. The responsibilities, the duties, the cares and the burdens which have come to him since the beginning of medical history have resulted in the development of an individual who is more or less the same the world over."

**Journal A. M. A.*, Nov. 26, 1910.

Verily, it is a pleasure and a relief to run across one of God's chosen men of the old school. The lamented Scotch MacLaren found him in the person of "Willum MacClure."

A man who does not live to cut, and with the highest ethical ideals; a man who will shield with infinite tenderness and skill the imploring life entrusted to his keeping, from the commission paying and fee splitting expert; a man with a God-given conscience who will conserve and hold as a sacred trust the contents of the confiding woman's abdomen, containing as it does the innocently mobile kidney, aggrieved uterus and the poor little blistered ovary.

Gentlemen, the signs of the times demand a physician of honor and of conscience, a savior of womankind. He must and will come, the sick public, rich and poor alike are calling for him.

I appeal to you be men of honor—be physicians.

All this calls to mind some of the beautiful words of Doctor Tucker in his oration delivered recently before the Medical Society of North Carolina. In speaking of the lessons of the Titanic's fate, the tragedy of the high sea, he said:

"On that awful occasion when death, ruin and chaos faced the crew there was condensed into a single sentence a thousand years of English History; when, down through the cold of that star-light night came Captain Smith's command from the bridge of that ill fated vessel, which an hour later would start with her captain and sixteen hundred souls, on the last two miles of her terrible journey to the bottom of the northern sea; 'Men be British!' What a fervent reminder of British rule of the sea, of gallantry, of heroism of England's sailors, all called to mind; and so the brave men went to their icy graves, rather than be saved in dishonor."

The Medical Expert. I have been asked by two members of this society to define my interpretation of the "Medical Expert." I can only give my psychosensory reflexes as a result of the stimuli that I have recently received in several interesting experiences.

To my mind no sin could be blacker or more unrighteous than the sale or prostitution of the sacred birthright of Science for a mess of filthy pottage.

To use the words of the immortal Lewis H. Steiner, the one time President of the American Academy of Medicine: "Called upon to aid justice, the physician who can claim to be an expert in consequence of special study and practical experience, should always feel that his position is one of special dignity and importance; that he should not swerve a hair's breadth on account of fear or favor or affection towards any of the parties involved in the case; that pecuniary compensation must not be suffered to stain the judicial ermine with which he is pro tempore adorned; that truth alone should be the guide to his steps, which should be confined within the limits of the subject presented for his opinion. Let this position be taken by the profession, and it will soon be recognized by the public, which at present is disposed to look upon the expert as a scientific advocate, retained to secure the success of a particular side of a case." Professor Emory Washburn, of Massachusetts, once said: "Every man of science, whatever may be the department in which he has made its laws a study, owes it to himself to do what he can to educate and enlighten the public mind to understand and appreciate the proper character and office of an expert, upon whose testimony the property and even the life itself of a citizen may depend."

Among the papers of the late Dr. A. O. J. Kelley, of Philadelphia, was found this definition:

"A Gentleman: A man who is clean inside and out; who looks neither up to the rich nor down to the poor; who can lose without squealing and win without bragging; who is considerate of women, children and old people; who is too brave to lie, too generous to cheat; who takes his share of the world and lets others have theirs."

The Regius Professor of Medicine in Oxford has thus beautifully expressed it:

"If we could, but be workers in the mint, and help shape for use the pure gold wrought in the laboratories by the miners of science."

How satisfying to follow a code rich-

er than golden fleece; if only to brighten the hopes of a mother who has watched some grim vampire crushed by a serum, as it sucked the life blood of her offspring, what a blessed privilege, what a God-given license.

"Only a cold hearted, apathetic, phlegmatic, white-livered generation, with blood congealed in the cold storage of ignorance and commercialism, would refuse to recognize the enormous debt which we owe to these self sacrificing miners of science; and yet there are today sons of Belial, daughters of Jezebel, direct descendents of the Scribes and Pharisees and hyprocrites in the time of Christ, who malign these prophets and wise men of the research laboratories, winners in a fight for humanity unparalelled in the annals of the race!"

Problems to Be Solved. While we will admit that there are many vital problems which confront us, as a profession, as we blaze the trail or tramp over rough and forbidding paths of this second decade of the twentieth century of medicine; while there are countless problems hitherto unsolved, which it is our bounden duty to face and fight; while prophylaxis, immunity, the story of the internal secretions, the development of tissues in vitro, the study of the renal function, the ravages of cancer, the withering touch of the great white plague, the slimy hand of the great black peril are all, yes all, to be reckoned with, they are not the least of these soul vexing enigmas, my friends.

There is still another threshold of inquiry we are to cross, and the tocsin has been sounded by the President of the Rhode Island Medical Society, Frederick T. Rogers, when he speaks of a problem which, if appreciated and considered in a purely impersonal manner, is of equal importance, for upon it largely depends the successful outcome of all the other tasks before us. It is this, how shall we regain that respect and feeling of security and confidence in the medical profession which was such a potent factor in human affairs fifty years ago when this Association had its birth, but which is today unfortunately lacking?

John B. Murphy, in delivering his Los Angeles address, bound, gagged and without mercy pushed into the lime light the shortcomings, irregularities and immoralities of the profession. One by one they were exhibited and analyzed.

God grant that in this fair Commonwealth of ours, the sacred robes of our medical forbears may no longer be gnawed and despoiled by any of the odious parasites, which have so long cheapened our craft and underminded public confidence. Scandals they are indeed when the voice of the public speaker is raised against us, when the insane prattle of the anti-vivisectionist, anti-vaccinationist, and when derogatory pamphlets receive general circulation, when the irresponsible "Comic Weekly, God save the mark, holds us to ridicule." (*Rogers.*)

As Murphy has said, there are now, notwithstanding years of protest and the application of well meaning remedial measures, too many in the secret for us to avoid open condemnation.

Acting upon the suggestion of the talented presiding officer of the Rhode Island Medical Society, there is no reason why the remedy should not be vigorously applied to these evils.

Let the profession, in this State, by their inherent strength rise with dignity to their former position of leaders among men, and with such modern weapons as *organization, education* and *publicity* wage a battle, and in so doing we will restore public confidence and emancipate ourselves and the public from the thraldom of charlatans and misfits.

If you would gain God's secret, don't let your anchors drag, and be mindful as you fight, that the Lord and the Law are satisfied with only your best.

In solidarity of purpose and action we have a source of strength that is far greater than any other agency.

Let the condemning search light of publicity and education, under your directorship, not only illumine the mind and satisfy the conscience, but point with unerring accuracy the way, for those of the public who have been misled in the past.

My friends, I have an abiding faith in the men of medicine of this State, my forbears have been of its ranks for the past one hundred years, how could I help it?

I have unlimited confidence in the power of this Association, but let me say to you right here, that a divided responsibility in its management counts for little.

This Association stands for a unified profession, purged of all personal animosities, yes, by sheathing forever the lance that has ruthlessly rent the Aesculapian mantle in times gone by, and by a willing service in this great battle for right, justice and humanity, we will but "uphold the tenets and traditions of a glorious profession."

THE PRESENT STATUS OF SURGERY IN FRACTURES

By Chas. S. White, M.D.,
Washington, D. C.
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(Read at a meeting of the Galen Society, Washington, D. C., Feb. 17, 1913.)

It has been only in the past few years that any great change in methods of treatment of fractures has made for itself a permanent niche in the progress of surgery, as we have been content to assume that well enough should be let alone, and the efforts of sporadic investigators along this line be unrecognized. With the great strides in other fields of surgery, the osseous system has been tardy in the extreme, but the present era promises to eclipse all others in its progressiveness. We should differentiate distinct advances in any work from mere changes, as a new method is not necessarily a better method.

There must be some good reason for the retardation of the surgery of fractures. The X-Ray, of course, has been the greatest factor in directing our energies toward the proper goal, and it was not until Roentgen's discovery that we were really in a position to proceed rationally to work out the problems which make for better results.

Among many surgeons there has been a wholesome fear of the unsightly deformities of fractures. When we consider that a bad result is usually constantly before both the patient and the public, it is no wonder that we have been somewhat chary in undertaking new departures, even when old ones failed. It requires an operator of considerable courage of his convictons and more or less disregard of popular opinion both within and without the profession, to lay down new principles of surgery, but just such have taken up the burden and with success. Early operators had not achieved any great success and were timid about persevering in their efforts in the face of such disappointments. Without the X-Ray and with imperfect technique results were generally unsatisfactory, for it was not generally known that bone surgery requires even greater care in the technique than the average abdominal case. Ordinary care is not sufficient to insure good work in the operative treatment of fractures, and it has taken many years to learn the simple lesson that bone is very susceptible to infection and that the resistance is lowered by traumatism. Because bone is a hard structure, it does not follow that it cannot be injured in the handling. The poor results are due largely to the rough usage, stripping of periosteum, and lack of that infinite care so essential in bone surgery. It is not surprising therefore that many were deterred from deviating from the beaten paths of surgical practice.

The Roentgen ray has allowed us to follow much more closely the anatomical and clinical course of fractures, and to check up and properly classify results. The deformity revealed by the Crooks tube was rather a rude awakening, but a proper interpretation has removed some of our fears. The ray has allowed us to take liberties which we could never have taken without it, and to carry on certain experimental work under control.

The work of Lane was probably the greatest incentive to open work in fracture treatment, and to him we are greatly indebted. It usually follows that, when a new departure is made along certain lines, the enthusiastic disciples of the art extend their activities beyond the rational zone to the discredit of the particular operation. So we have seen that Lane has been taken too literally perhaps, and ardent surgeons have failed to get good results, not because Lane misinformed them, but without proper preparation work was undertaken for which they were unfitted. We were shown that it was possible to use not only wire in holding

bone, but that large plates could be used with absolute safety, and left for an indefinite period. The silver plate of Pick was a forerunner, but the steel plates of Lane with steel screws were more popular, and immediately came into common use. It was freely predicted by more than one surgeon that half of the fractures of the future would be treated by the open operation. The method of exposing the injured bone, bringing the ends directly together and fixing them, appealed to the surgeon, and bone plating jumped into popularity almost over night. As a result, simple and compound fractures were plated by every one who did bone work. It has taken several years to get over this bone hysteria and place the plating of bones on the proper sphere. Even at the present day there is some difference of opinion regarding the indications for plating. There is no difference of opinion, however, regarding the technique. The bone should be handled as little as possible, never with the hands of the operator, nor with instruments which have touched the skin, but with long-handled instruments made for the purpose. The bone should not be crushed with strong forceps or be dragged from its position, as a great amount of trauma may be so created and the vitality of the bone consequently lowered, favoring infection and making the plate intolerable; for there can be no doubt that the plate is resented by tissues in a state of inflammation. Vanadium steel has been recently substituted for the usual plate, for the reason that it is not so brittle and is much tougher, allowing a moulding to a limited etxent.

Lane's plates seem particularly adapted for those fractures of long bones that tend to become displaced when reduced. We find the oblique fractures particularly good cases. For those cases in which reduction is difficult, but in whch correct position is easily maintained by little force, a wire is often sufficient. Silver wire has been largely replaced by iron wire and phosphor-bronze wire, because of their greater tensile strength. So far as tolerance is concerned, silver has no advantage over either iron or steel. We find that many fractures remain reduced when good apposition is secured by an open operation, and for those cases no foreign substance is employed.

When the usual methods of reduction fail under a general anesthetic the open method is employed, and then the question of plate, wire, or mere reduction is considered. The more familar one becomes with bone work, the less likely he is to employ any forcing substance to promote intimate contact of the fragments. There is but little doubt in the mind of the author and of some others as well, that a plate tends to delay the healing of bone; in fact, it has seemed in a few instances to prevent good union. It is the practice more and more to depend on good apposition, splints and casts, and less upon plates. Unquestionably the plates have done excellent work, but on the other hand they have been followed by many disappointments. It must be said that the Lane plates have been used without discrimination, and the non-union and infection that have followed should be laid at the door of the surgeon rather than at the door of the plates. While the open method has come to stay, the limitations must be recognized.

The nailing of fractures has come in for much consideration and deserves it, for it furnishes a safe, rapid, and easy means of maintaining a good position, the nail afterward being withdrawn.

The ingenious bolts or taps of Sherman are very efficient in selected cases, but unfortunately every case is not suited for this type of fixation. The socket wrench and screw driver are almost an indispensable part of the outfit, and are found in but few instrument cases.

The wiring, nailing, or plating of a compound fracture should never be undertaken until several days have elapsed, for the very simple reason that the injury has so devitalized the area that infection is possible if not probable, and that in the presence of infection foreign bodies aggravate the condition and fail utterly in their purpose Infection is the greatest foe to internal mechanical means for maintaing good position of bony fragments.

In the fractures about joints where normal or excessive callous has impinged upon the articulation, Murphy has devised an operation, namely, arthroplasty, and the results in his hands have been nothing short of marvelous. It is not an easy operation, but one which requires good judgment and considerable mechanical ability. It con-

sists in chiselling away the callous and modeling the opposing bones so that they shall be as like in contour as possible to the normal joint, then turning in a fat and fascia flap, stitching it between the bones and closing the joint. The fascia gives strength while the fat acts as a synovial membrane. In the course of several months a very good substitute for the synovial membrane will gradually be evolved, with nearly all motions of the joint restored. Some of the cases which Murphy has exhibited at his clinic and at many of the society meetings cannot but impress one with the possibilites of this operation. Arthroplasty is used in the hip, knee, ankle, elbow and shoulder with equally good results.

We are indebted to Murphy for a vast amount of recent knowledge concerning the growth and union of bone, and he has made a practical application of it in non-union or delayed union. It is not an uncommon experience to get non-union in patients who are the picture of health, and by many this is attributed to a general condition, faulty metabolism, syphilis or other constitutional disease; but Murphy believes it is purely local and explains it in this way: a large clot, connective tissue, muscle, or other structure gets between the fragments and in consequence cicatrical tissue forms. This tissue contracts, covering the ends of the fragments and leaving a small cyst between. The periosteum has been hemmed in and cannot extend across the bridge of cicatrix and the small lake. We have then somewhat the formation of a joint, with the cyst forming a synovial membrane. Murphy's remedy is the auto-transplant. The fragments are exposed, freshened, the medullary canal opened, and a graft from the sound tibia is removed and inserted like a dowel pin into both fragments, thus holding them and connecting them with bone. It is not necessary that the transplant should be covered with periosteum.

Immediately the periosteum of the living bone will extend along the graft, as it is the carrier for Haversian canals, and promotes an osteoporosis. The graft is a structure along which the osteogenetic element may travel, and it acts as a bridge for the osteoblasts. It is essential, and this must be emphasized, that the transplant must be in contact with the proliferating osteogenetic element. Not only in non-union but in recent fractures, Murphy has had occasion to use this graft. Gradually the graft is absorbed and new bone replaces it. It is far better to use bone from the same individual than to employ that from an animal or another person, as grafts from animals of another species and even of the same species have been a failure in the hands of the best operators.

In conclusion, the author would emphasize the necessity of careful selection of cases for the open operation, bearing in mind the time for such operation, and the method of maintaining good apposition. The Lane plate is unsatisfactory in the hands of the inexperienced, and will be used but seldom by the experienced operator. Murphy's arthroplasty has a wide application, and as we become more familiar with it the average operator will avail himself of this addition to his armamentarium. It would seem to the author that we have at last seen the light in open operations in fractures.

THE TREATMENT OF THE INSANE IN PSYCHOPATHIC WARDS.

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(Read at the Conference and Exhibit on Mental Hygiene, March 17, 1913.)

To understand the real significance, importance and value of the psychiatric ward one must take into consideration to some extent the evolution of the treatment of the insane and must recognize that on one end of a chain is the treatment of the insane as if they had descended to the levels of brutes and animals, that they were witches or that they were abandoned by God and deserved less consideration than the criminal, and at the other end of the chain is the psychiatric ward the most advanced and humane method of dealing with those mentally sick, recognizing that they are patients in the strict sense of the word, sick human beings, and therefore to be

treated with the same care and consideration as one suffering from typhoid fever, pneumonia or measles and with no more stigma attached than one afflicted with these diseases suffers when going to a general hospital.

The links in the chain reflect little credit upon either the intelligence or the humanity of society.

To understand what the psychiatric ward really means to the mentally sick let me briefly review the steps in the evolution of psychiatry from antiquity to the present.

In 460 B. C. Hippocrates removed the insane from the care of priests who until that time treated them by ocular consultations in temples dedicated to Esculapius.

The great genius Hippocrates recognized that mental diseases were the result of abnormalities of the brain, and were due to acute and chronic diseases of the organs of the body, the treatment being by medicine, diet and rest.

Aretaeus (60 A.D.), Galen (160 A.D.) and later Aurelianus a contemporary of Trajan and Hadrian placed the study of psychiatry on a rational basis, and the latter at this early period advised and practiced the removal of restraint in the treatment of the insane.

In the middle ages medicine and especially psychiatry declined, and insane patients became the victims of superstition and fanaticism and were treated by the priests to whom their treatment was again relegated, as devils and witches and were put to death at the stake or confined in jails.

It is much to the discredit of the human race that these poor unfortunates were victims of witch-trial as long as the latter persisted, in the 18th century.

With the Reformation, only incipient advances were made in psychiatry, but the lot of the insane remained deplorable until the middle of the 18th century, and though physicians recognized that insanity was an expression of a diseased nervous system, that it was curable was yet unrecognized and the jails still were considered the proper place to lodge an insane person.

The cure of the insane was first attempted in England about the middle of the 18th century, at St. Luke's Hospital, London.

In France in 1780, Howard and the Emperor Joseph, who were studying the conditions of hospitals and prisons, inaugurated important reforms.

Asylums, however, had been established in Italy in 1352, in Rome in 1548, in Valencia, Spain, in 1409, and in France in 1660 when the Hotel Dieux was used for the care of this class of unfortunates.

It remained for Pinel to really inaugurate reforms, which proved to be permanent, when in 1792 he removed the chains from the insane and treated them as human beings.

However, as late as 1818 Esquirol, a noted French alienist, stated that the insane in France were treated with less consideration than criminals and animals.

In 1845 Griesinger wrote a book which was epoch-making in its beneficial influences and placed the study of insanity for the first time on a scientific basis. (See von Krafft-Ebing Textbook of Insanity, 1904.)

It is only comparatively recently really that insanity has been studied to any satisfying degree in a scientific manner and it is only in the last few years that the disturbances in the function and the organs of the body in their relation to insanity have been studied in laboratories as well as from the standpoint of the clinician and that the importance of studies from a psychological standpoint has been recognized.

Germany has comparatively recently handled the situation in a thoroughly satisfying manner.

At Giesen, for example, there is an institution for the care of the incipient insane with 70 beds, and in Munich there is an institute where in one year 3000 to 4000 cases were treated and with such good results that the building of asylums has been postponed. These clinics are open day and night so that patients may be received without delay under the care of physicians who are expert in the treatment of insanity. There is this great advantage that no legal document is required.

This brings us to the consideration of the subject of my address; namely, the psychopathic department or ward.

By this I mean a department attached to a general hospital where those afflicted with insanity in its infancy may receive at once the very best, most approved, up-to-date care and attention by skilled physicians,

trained to this kind of work. The incipient insane must be looked upon as sick individuals and are to be treated with the same care and study as those suffering from any other disease requiring hospital care.

Laboratories are a most important feature of such a unit. Studies of the blood, cerebro-spinal fluids and the various secretions by bacteriologists, pathologists and chemical physiologists can thus be made. A psychologist should be connected with the department to study the individual in a properly equipped laboratory. This department must be provided with hydrotherapeutic apparatus, occupation rooms, rooms for diversion, and should afford opportunities for outdoor exercise and amusements. There should be sufficient and competent medical attendance and the number of nurses should be adequate. These should be specially trained and knowledge of massage and gymnastics or calisthenic work should comprise a part of their equipment.

Let me call your attention to some of the present features of asylums today in contrast to this up-to-date and much desired method of treating the insane. It is a sad commentary upon our social condition that the first care of acute cases of violent insanity is often received in prison cells.

In 14 States the insane are temporarily or for a long time confined in jails or almshouses.

Wisconsin is the only State that has sufficient accommodation for its insane. Asylums in most of the States are over-crowded.

Furthermore, there is an average of one medical attendant to 200 patients and in some, one to 400. These medical men have their time largely occupied in administrative work and hence can give little time to the study of the cases or sufficiently close attention to their treatment.

Institutions throughout the country lack laboratory facilities, an extremely important factor in the treatment of these cases.

In 4 institutions in the United States the number of nurses is one to nine patients, but usually the ratio is one to 15 or one to 40.

In 29 of the 40 States investigated only was there installed hydrotherapeutic apparatus.

In only 19 of 37 States was any attempt at occupation made and in none of the remaining States was there any occupation afforded the patients whatever.

These facts are laid before you to emphasize the great need of proper facilities for the treatment of the incipient insane.

As long as the people will allow their insane to remain in jails and poorhouses there they will remain. Not to know of the conditions can no longer be offered as an excuse, for this movement now on foot is intended to show the people the actual state of affairs. But it is really up to the people to see that the legislature provides better accommodation and care for this sad class.

Psychopathic wards in general hospitals are found only in the Albany Hospital and Bellevue Hospital in New York and the St. Francis Hospital, Pittsburg.

In the Albany Hospital there are 32 beds, 3 doctors and 10 to 12 nurses.

In the St. Francis's Hospital, Pittsburgh, there is a psychiatric ward accommodating 125 patients, of which, however, 75% are chronic cases. The State of Pennsylvania has appropriated money for building an addition to this but it is not yet in operation.

There is also a psychopathic ward connected with the Bellevue Hospital of New York.

In addition to these there is at Boston a State Psychopathic Institute, a Psychopathic Institute in New York, and in Baltimore there is the Phipps Psychopathic Institute for the accommodation of 60 public cases and 20 private cases.

In Michigan and Illinois there are somewhat similar institutions, and here and there, in Rhode Island, California, Oregon, Wisconsin, Oklahoma, Ohio and Maine efforts are being made in this direction.

In conclusion the benefits to be derived from a psychopathic department or institution are (1) First care under ideal conditions. In this way many cases can be cured that otherwise would go to an asylum to remain insane. The percentage of cure would be instead of 20%, as it is in asylums, more than 50%. (2) The avoidance of the stigma which is attached to anyone who becomes an inmate of an asylum. (3) The opportunities to study the causes of insanity by the aid of laboratory facilities. (4) The advantage as a teaching centre for physicians, general practitioners as well as for those physicians intending to

take up institution work. (5) To act as a centre for distributing information to the public along the lines of prevention of insanity and care of those who have recovered. (6) To act as a centre for after-care societies. (7) In an out-patient department borderline cases may apply for treatment at an early period in their psychosis.

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A STUDY IN DIAGNOSIS IN CHILDREN.

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(CONCLUDED FROM MAY ISSUE.)

CASE 4. Pearl S., one year old, had always been well. She was fed on raw, unmodified cow's milk. She had had some slight disturbance of the bowels about the middle of July, but had almost entirely recovered. She suddenly began to vomit about noon, July 28th. The vomitus consisted at first of milk, but soon became watery; it did not contain bile. Diarrhea came on in a few hours. The movements were at first fecal in character, but soon became watery and colorless. She vomited and had a movement every few minutes. Thirst became marked, but everything taken was vomited. Castor oil and calomel were also vomited. Her temperature that night was 104° F. The next morning she was much collapsed. She was seen at 9 a. m., twenty-one hours after the onset.

On examination she had evidently lost much weight. Her skin was dry and her extremities cold and blue. The frontanelle was much depressed. Her eyes were wide open and staring but she took very little notice. The pupils were equal and reacted to light. Her tongue was dry. She held her head rigidly backward. The heart and lungs were normal. The abdomen was much sunken but not rigid. Neither liver nor spleen was palpable. She tossed her arms about constantly. Her legs were somewhat rigid; the knee jerks were equal and exaggerated; Kernig's sign could not be determined because of the rigidity.

The history and physical examination are so typical of cholera infantum that there is no need of considering any other disease. The nervous symptoms are due to a combination of toxemia and loss of fluid.

The prognosis is very grave. There is probably not more than one chance in twenty of recovery. The disease is, however, to a certain extent, self-limited. If she lives through the next thirty-six hours the chance of recovery will be very much better.

The main indications for treatment in this condition are: (1) to empty the stomach and bowels of their toxic contents; (2) to supply fluid to the tissues which are being so seriously drained; (3) to restore the surface circulation; (4) to reduce the temperature; (5) to keep the patient alive until the disease has run its course.

Nature is already doing her best to empty the stomach and bowels. Nothing can be done to help her. Cathartics will be vomited and stomach washing and irrigation of the bowels will only increase the collapse. There is no objection, however, to giving the baby cool water to drink, even if it is vomited, as it will make her more comfortable and help to wash out the stomach.

The only way in which fluid can be supplied to the tissues is by the administration of physiological salt solution subcutaneously. She should be given from four to eight ounces at a time, repeated every three or four hours if absorbed.

The surface circulation is best restored by the application of heat externally in the form of heaters or hot packs. She should be at once surrounded with heaters, and, if this plan is not successful, be put in a pack at 100° F., or a little higher. Restoration of the surface circulation will usually reduce the internal temperature. If it does not, irrigation of the colon with water at 90° F. will usually do. The temperature is hardly high enough to require this at present.

It is useless to give stimulants or other drugs by the mouth, as they will not be retained. All drugs must therefore, be given subcutaneously. The best stimulant is caffein. This may be given subcutaneously in the form of caffein-sodium benzoate.

The dose for this baby was quarter of a grain every three hours. Strychnia, in doses of 1-500 grain, may also be given subcutaneously, if necessary. Alcohol is contra-indicated. Aldrenalin is indicated if the cardiac failure increases. Unfortunately it has very little action when given subcutaneously, and intravenous injection is very difficult in a baby of this age. If the restlessness increases, morphia, in doses of 1-100 of a grain, given subcutaneously, will aid by quieting her and saving her strength.

Food of any description is contra-indicated until the vomiting and diarrhea have stopped. The first food given should be 1% solution of starch in the form of barley water, with 5% of milk sugar added.

CASE 5. Martin Ferill, six years old, began to have a loud ringing cough with slight difficulty in breathing during the night of May 23rd. A cough and difficult respiration continued without diminution during the 24th. That night the difficulty in respiration increased considerably so that he slept but little. He was no better on the morning of the 25th, and was not able to talk aloud. During the day the difficulty in breathing increased very rapidly so that he had to sit up to breathe. He became cyanotic and was unable to take nourishment. His temperature during these days had ranged from normal to 101° F. Repeated examinations of the throat had shown nothing abnormal. He was a large, strong boy. He was markedly cyanotic and was sitting up in bed with his head stretched forward. The inspiration was noisy The cough was harsh and dry. He was unable to speak above a whisper. The cervical lymph nodes were slightly enlarged. The tonsils were moderately enlarged and somewhat reddened, but there was no exudation upon them. There was no nasal discharge. There was sinking in of the supraclavicular space of the lower intercostal spaces, and of the epigastrium with each inspiration. Percussion of the lungs was normal. The respiratory murmur was very feeble, but not abnormal in character.

Very many loud, dry, and coarse moist rales were heard over both sides of the chest. The rales were alike on both sides, and both behind and in front. There was nothing abnormal about the heart except the rapidity of its action.

The abdomen was normal. The liver and spleen were not palpable. The extremities were not examined. The axillary temperature was 101° F., the pulse 150, the respiration 24.

The cyanosis and the retraction of the epigastrium, intercostal and supraclavicular spaces, are simply manifestations of some obstruction to the entrance of air into the lungs, and do not indicate where the obstruction is located. The head is stretched forward in order to make breathing easier by straightening the upper air passages.

The normal conditon of the nose and throat rules out obstruction above the larynx. The signs in the lungs are not sufficient to account for so much cyanosis and retraction. The fact that the rales are alike in both lungs, both back and front, shows, moreover, that they are not made in the bronchi, but transmitted from above. The relatively low rate of the respiration also shows that the trouble in the lungs is not the cause of the cyanosis and retraction.

The obstruction must, therefore, be situated in the larynx. The noisy inspiration, the harsh dry cough, and the whispering are all characteristic of inflammation of the larynx and corroborative of the diagnosis of laryngeal obstruction.

The next point to be determined is, whether the trouble in the larynx is catarrhal or diphtheritic. The progressive increase in the difficulty in respiration is almost pathognomonic of laryngeal diphtheria and entirely different from the course of catarrhal laryngitis, in which the obstruction is not continuous and progressive, but occurs in paroxysms, being worse at night than during the day.

The progressive increase in the symptoms is of itself sufficient to justify the diagnosis of *laryngeal diphtheria.* The slight degree of the fever is consistent with either condition, but is more characteristic of laryngeal diphtheria than of catarrhal laryngitis, in which the temperature is usually higher.

The absence of marked inflammation of the throat and of enlargement of the cervical lymph nodes does not count at all against laryngeal diphtheria, because in primary laryngeal diphtheria the throat is usually not involved, and as there is but little absorption from the larynx, the lymph nodes are not enlarged.

It would be criminal, in this instance, to await bacteriological verification of the diagnosis. A negative culture, if taken from the throat, would not, in fact, invalidate the diagnosis of laryngeal diphtheria, because the diphtheria bacilli are absent from the throat when the diphtheritic process begins in the larynx.

The prognosis is practically hopeless without intubation, and very grave with intubation and antitoxin the chances are in his favor, because he is in good general condition, there is no involvement of the throat, practically no septic absorption, and his heart is strong.

Intubation should be done at once. He should be given six thousand units of antitoxin as soon as he has quieted down after the intubation. This dose should be repeated in eight hours.

It is impossible to state in advance whether he will need more or not. If his temperature drops to normal and the general condition remains good, it will proba-

bly not be necessary to repeat it. If he coughs up the tube and the obstruction does not return, further doses will not be needed. Otherwise, the antitoxin must be continued, perhaps in larger doses.

The tube should be removed on the third or fourth day. If the obstruction recurs it must be replaced. It is far wiser to have some one competent to remove and replace the tube in the house as long as the tube is in the larynx, than to leave him alone, because emergencies, such as blocking of the tube and coughing up the tube, are liable to occur at any time, and, if not met immediately, are likely to prove fatal.

The food should be milk and soft solids, like junket, baked custard, ice cream, soft cereals and soft toast. Some children take liquids better; some soft solids. It is impossible to tell in advance which he will take better.

Most children take their food best sitting up. It is wiser, therefore, to try him first in this position. If he has trouble in taking it in this way he may be able to take it better lying on his back with his head lower than his body. If he has much difficulty in taking food, it is safer to feed him with a tube introduced through the mouth than to persist with other methods. No other treatment is indicated at present.

CASE 7. Mathew Lewis, twenty-six months old, had always been unusually strong and vigorous, but very nervous and excitable. He had had a little "cold in the head" for two or three days, but had not seemed at all sick. The The appetite was rather poor February 19, and consequently he was not given as much to eat as usual. His bowels moved normally just before he went to bed. He was very restless and feverish all night, and toward morning vomited several large curds of milk. He had a severe convulsion about 8:30 a. m. on the 20th.

The colon was washed out and a considerable amount of well digested, yellow feces obtained. He was given two tablespoonfuls of castor oil, which resulted in three large loose, yellow movements which contained a little undigested food He had no more convulsions, but twitched a little from time to time. He coughed occasionally, and moving, coughing, and crying seemed to hurt him. The rectal temperature had ranged between 104° F. and 104.5°. He was seen at 9 a. m. February 21.

He was well developed and nourished. Pallor was marked and there was a slight tinge of cyanosis about the lips. He was perfectly conscious, but restless and irritable. There was a slight tendency to rigidity and he twitched occasionally. There was no stiffness or tenderness in the neck. The pupils were equal and reacted to light. The alae nasi moved with respiration. The ear drums were normal. The tongue was moderately coated. The throat was normal. The heart and lungs were normal. The liver and spleen were not palpable. The extremities were normal. There was no definite spasm of the extremities and no paralysis.

The knee jerks were equal and slightly diminished. Kernig's sign was absent. There was no enlargement of the peripheral lymph nodes, and no eruption. The rectal temperature was 104.6° F., the pulse 140, the respiration 70. The leucocytes numbered 24,000.

The persistence of the high temperature in spite of the thorough emptying of the bowels, the practically normal character of the movements and the cessation of the vomiting rule out all affections of the gastro-intestinal tract. The absence of sore throat and eruptions rules out tonsilitis and scarlet fever. The initial convulsion and the persistence of twitching, together with the slight tendency to rigidity, suggest to a certain extent, some form of meningitis, more probably the cerebrospinal. The normal mental condition and the absence of all physical signs of meningeal irritation, unless the twitching and tendency to rigidity be such, practically exclude meningitis.

An initial convulsion, moreover, is not uncommon at the onset of any acute disease in childhood, and a high temperature often causes twitching and a tendency to rigidity in nervous children. These points do not count much, therefore, in favor of meningitis.

The continued high temperature, the slight cough, the pain on motion, cough and crying, and, more than all, the much greater increase in the rate of the respiration than in that of the pulse (2 to 1 instead of normal, 4 to 1), make the diagnosis of pneumonia practically certain in spite of the absence of physical signs in the lungs. The movement of the alae nasi, the slight tinge of cyanosis about the lips, and the diminution of the knee jerks, although not of much importance, are corroborative of this diagnosis.

The prognosis of pneumonia in childhood is very good. In infancy, however, it is a far more serious disease. This boy has always been strong and well, is in good general condition, and probably will not have much lung involved. The symptoms of nervous irritability do not make the outlook any less favorable. The chances are,

therefore, very much in favor of his recovery.

The windows must be kept wide open, day and night. The cool fresh air will probably lower the temperature somewhat, and thus diminish the nervous symptoms. If they persist, the temperature must be reduced by bathing. The coal tar products should never be used in pneumonia, either to reduce the temperature or to relieve nervous symptoms. The tempera
to be reduced, not because it is 104.6° F., but because in this instance this degree of temperature causes nervous symptoms. If it did not, it would not be necessary to treat it.

Sponge baths of alcohol and water, equal parts, at 90° F. will probably be sufficient to control it. If they do not, fan baths will almost certainly be effectual. Fan baths are given in this way: The patient is stripped and wrapped in cheese cloth. This is then wet with water at 100° F. and the patient fanned. The temperature is reduced by the evaporation of the water. The cheese cloth is wet from time to time as the water evaporates.

Children seldom object to this form of bath. If this is ineffectual, he may be given a cold pack at from 60° F. to 70° F. Children seldom bear tub baths well, and it is, as a rule, wiser not to use them. If necessary, he may be given sodium or potassium bromide, in doses of from three to five grains from time to time.

HELPLESSNESS.

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(Read at Annual Meeting of State Med. Ass'n, July, 1912.)

"Seest thou a man wise in his own conceit? There is more hope of a fool than of him." Whenever we see a physician or surgeon who is sure his method is perfect, you can set it down that he has stopped growing. Of course "the way of every man is right in his own eyes;" yet judged from the average we find this man far from perfection. The surgeon who has two hundred major operations without a death, or the physician three hundred typhoid patients with no fatalities, has reached perfection and needs no further study. You all know these perfect men. None of them are at this meeting. They are at home working like Turks to make the almighty dollar. They never attend the State Medical meetings; they are "too busy;" they very rarely attend the county society meetings, because they are superior to those who do attend, and it is a waste of their valuable time to affiliate with those of inferior attainments. They rarely or never ask for consultations, and when a consultation is thrust upon them, they ignore the consultant's advice. They insist on huge doses of calomel for every ill. They use compound cathartics by the thousand and prescribe acetanilid by the pound. They insist on big doses of morphin in pneumonia. They give opium in all gastro-intestinal troubles of children. They use antitoxin in diphtheria only as a last resort. They haven't heard of vaccination for typhoid, nor Fowler's treatment for peritonitis. In fact, they are wrapped in the solitude of their own self-sufficiency.

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We have all stood by the bedside of the pneumonia patient and noted the high fever, the rapid pulse, the difficult breathing, the cyanotic complexion, the rasping cough, the bloody sputum, the muffled heart sounds, and watched the gradual and irresistible submergence of the vital forces from the accumulating toxins, and felt our impotence in stemming the tide of death. Then we censure ourselves for our incompetency though we have used the best at our command. It is right here that there surely ought to be some line of treatment evolved, so that our mortality would not be one in four. It is no wonder that we feel dejected by our miserable failures.

The great white plague still stands as a monument to our helplessness when it comes in the galloping form. We use our most potent means to stay its advance, but we stop short in abject defeat. In the graver forms of scarlet fever, when the poisons rapidly overwhelm the vital forces, we can scarcely do more than wait for the grim reaper to gather in the harvest, while we feel, as did the priests of old, like calling on Jove to aid with his thunder bolts in

overcoming the destructive demon carrying off the helpless one in our charge.

In some of our graver typhoid patients with rapidly downward progression, with tympanites, delirium, failing heart, the dreaded hemorrhage, or fatal perforation, when we stand by and watch the life ebb away, there comes over us a sense of chagrin that all of our most heroic efforts have been fruitless, and we turn away with a longing for a deeper and better and keener insight into the mysteries of our profession.

Two weeks after we had thought our diphtheria patient safe, we get a telephone message to come at once, but when we get there we are told the child is dead. Then we feel there is something lacking in our therapeutics when we have nothing to counteract the toxins of diphtheria upon the nervous system. We must needs explain this to the kindred, and we blush to acknowledge that with all our knowledge and skill and research, we are still helpless in post diphtheritic paralysis. Somehow we feel we should be armed against the encroachment of disease from every quarter.

We have seen the baby die from gastro-intestinal trouble, in spite of every therapeutic measure at our command. We here have a stricken conscience, if anywhere, for failure to save the baby when it is most expected of us. We cannot explain it to the friends or ourselves, except through lack of sufficient skill.

Many times we must acknowledge our helplessness in chronic nephritis, or in rapidly advancing acute cases. It seems we surely ought to be able to stop the progress of the disease and save the patient, but we fail to make good our boasted skill in medical treatment, and the patient dies. We turn away crestfallen and dejected, and make explanations to friends and inquirers.

In diabetes of childhood we are utterly helpless. Our best efforts fail, and we are compelled to explain to the parents that we are absolutely impotent in the case, that there is no hope whatever to prolong the child's life beyond a few days or weeks. And we feel like a culprit when we turn away from the progressively fatal disease.

We all have had the inoperable cancer patient. We have felt the futility of our remedies in battling the disease. Time and again we have had to explain to patient or friends that it was only a matter of weeks or months; that we could render the patient comfortable, and mitigate the worst features, but there was only one end in sight —and that was inexorable death. And we feel like a coward when we must acknowledge that we can do nothing to stop the lingering termination.

When we meet all these grave forms of disease, and fail utterly to measure up to the expectations of the patient or friends or ourselves, we feel as if some other profession or calling or vocation were more desirable than the medical profession. We long to be able to do something where success is sure and worry eliminated.

But it is this very desire to accomplish one's ends—the abasement of defeat, the inability to conquer, the failure where success ought to obtain—these are the hopes of afflicted mankind. All over the world, in all times, it has been the dissatisfied ones, the restless ones, the ones that wanted better things—these have been the helpless of the race. These are the ones who, when some great achievement has been accomplished, turn their powers thus strengthened to graver perils and make the way of those who follow more comfortable and pleasant.

It is the determination to destroy all the barriers to perfect health that makes the true physician feel abashed when he meets cases that baffle his supremest efforts. He does not sit back and say, "The fates are against us," or that "it was the will of an Allwise Providence." The true physician does not fail to give homage to the Allwise Providence, neither does he fail to recognize the fact that the desire to overcome difficulties was placed in his breast for that purpose.

You must not think we are cowards because we are helpless before the manifestations of so many conditions. It must not be inferred that the doctor is shirking his duty when he fails to help the one beyond medical skill. He is longing for a higher and better and keener acumen so that he can overcome the very weaknesses of which he now stands in dread. He knows he has all the accumulated knowledge of all the doctors of all time, and has at his command many weapons to fight the enemies of

the race. He knows his short-comings, and aims to remedy them. It is this lack of ability to cope with everything he meets that makes him discontented, makes him restless, makes him determined to overcome all difficulties, break down the barriers and make easy the way for all those who follow, just as Jenner, and Loeffler, and Pasteur, and Lazear have handed us the benefits of their great discoveries.

No, it is not cowardice nor incompetency nor lack of knowledge that makes him seem cowardly. But it is the instinctive combativeness that comes over true men when they see a child or a woman or a weakling maltreated by a bully. So he feels like a coward because he is unable to accomplish his ends, and feels that he is expected to rescue the helpless ones from their peril. If there is any one who is free from cowardice, it is the doctor. There are weaklings and cowards and renegades among them, but the great mass of them are made of stuff that stands the test of defeat without losing their manhood. They will ultimately stand before the world as the preservers of the race without a suspicion of taint or cowardice on their names.

With all the social, scientific, mechanical and medical advancement in the world, nothing is more apparent than the rapid advancement of the medical profession in overcoming all the dreaded diseases. We have many things yet to do. We will yet see the time, and it may not be far off, that disease as ordinarily understood will be practically unknown. The time is here right now that it is almost as much disgrace to have typhoid fever as it is to be lousy. To have smallpox is a disgrace. An epidemic of diphtheria deserves the severest censure. The same will soon be true of measles and whooping cough and scarlet fever and bubonic plague.

The time has arrived when the medical man cannot stand on the grades he made in school and college and medical school. He cannot stand on the reputation he has made in his chosen field. He cannot stand on what he has accomplished. He must still be busy. He must continue to grow. He must not stop till the incurable disease is made curable. Not that people will live forever under the guidance of the skilled physician, but the barriers of medical advancement will be gradually broken down, and the medical man will stands on the very highest pinnacle of deserved honors.

I believe we are on the eve of the discovery of the cause and the cure of cancer. (Personally, I have written more death certificates for cancer than any other disease). We know the cause, course, cure or prevention of many diseases, but we are as much in the dark as to cancer as we were fifty years ago. But the cause will shortly be discovered, for there is a world-wide seeking in this direction, a kind of universal miasma that all men, without concert, breathe at once, and is a sure forerunner of some great discovery, and it will be the greatest boon given to humanity since diphtheria antitoxin was evolved.

If I have been calling your attention to our helplessness in so many grave conditions, you must not presume that this inability to cope with grave diseases is an unmixed blessing. "He that overcometh," applies equally well to the physical as to the moral world. The breaking up of impregnable barriers have made stepping stones for advancement in all times. These once destroyed, the way is easy for all that follow. Take for example the prevention of smallpox. We probably have no conception of the dread that this disease gave the physicians when they had no means of controlling it.

And dipththeria. We scarcely dread it now. The older physicians know something of the horror attending it in its malignant form. We now scarcely give the well ones an anxious thought, well knowing we can limit it to the ones already afflicted. How have we inherited this greatest of all scientific evolutions? From the patient researches of the laboratory workers. How has the yellow fever plague been driven back time and again in recent years? By the results of lives sacrificed on the altar of medical advancement—witness Lazear and Reed.

How has malaria been immensely diminished in recent times? By the persistent study of the cause of its dissemination at the bedside and in field and swamp and laboratory, and the time is at hand when malaria will be unknown in regions

that have been the death bed of millions of people.

Cholera has been robbed of its dread by ordinary sanitary precautions and boiling the drinking water.

Bubonic plague has been stopped short by killing off the rats and destroying the fleas. How has epidemic cerebro-spinal meningitis been checked? By the splendid work of our research laboratories, and the conscientious clinician. What has taken the horror from the great black plague? The laboratory discovery of a remedy that does the work in a single day that mercury and potassium iodide takes half a year to do.

Typhoid fever, the great feeder of physicians, is doomed to early extinction by modern sanitation and preventive vaccination. Note the destruction of life in the Spanish-American war when the army officials ignored the common decency in the camps. Note the difference in the Japanese army in Manchuria; and still later the tremenduous advance in protecting our army when we rushed 20,000 troops to the Mexican border, and not a case developed in the whole army. Why? Every man was protected by vaccination before starting for the Southern encampment. Whence comes this marvellous advancement in protecting the lives of our soldiers? It comes from the laboratories of consecrated men who devote their skill and knowledge in developing preventive medicines— men whose names are scarcely heard outside of scientific circles, men whose work will live long after their names are forgotten, and in the future many of our present diseases will be studied as cusiosities of past ages.

Selections

SUGGESTIONS FOR INCREASING INTEREST IN COUNTY SOCIETIES.

1st. Improved programs. Interest in the meeting depends largely on the attractiveness of the program.

2d. Take up post-graduate course as recommended by American Medical Association. This systematizes the program.

3d. Confer with State Board of Health for at least one meeting a year on public health matters. Co-operation with the Health Department is essential to the welfare of the community.

4th. Have at least one reader a year from a distance. Confer with Committee on Scientific Work of State Society if necessary. They will be glad to suggest names of those willing to render such service.

5th. Arrange for one or more clinical meetings a year. Select subject and request all who have proper cases to bring them before the society; then have a discussion on the same, always with the understanding that discussion of the case shall not be held in the presence of the patient; otherwise, frequently patients cannot be shown for obvious reasons.

6th. Arrange for demonstration by bacteriologists and pathologists with specimens, lantern slides, etc.

7th. Arrange for social part of meeting. Some light refreshments at the close of the meeting are an adjunct to fraternal intercourse.

8th. See that meetings are held often enough to keep up interest. Once or twice a year is not enough. Invite every member of the profession in the county to at least one meeting a year, not necessarily inviting them all to the same meeting. In counties where men do not show a willingness to write papers either designate writers for different meetings or see that outsiders are invited—in other words, see that the meetings are made interesting. It should be the aim of every county society to secure a permanent home; a small library, with a supply of current journals, and the use of the larger libraries for reference books will greatly increase interest in the county organization.

9th. Arrange the time of meetings to accommodate the largest number of members. Where men come from long distances, an evening session will often appeal to a larger number of men when it permits them to reach their homes at a seasonable hour.

10th. Select as officers men who are willing to work. Keep good men in office. Do not promote those who have shown they will not attend to the duties assigned them. Efficiency is the only criterion of leadership. "No physician should accept office unless he is prepared to give the position the atten-

tion that it deserves and unless he is interested in the work."

11th. In small societies do not unduly multiply offices—the secretary's and treasurer's duties can be best done by one man. Always supply officers with clerical help if work is onerous. Detailed drudgery work should not be asked of men serving others without compensation.

12th. Make the dues large enough to warrant conducting the society work in a proper manner. Those who object to the amount of their dues usually do so because they are not receiving full value for them. Give back a dollar in value for every dollar paid in and complaints will be few.

13th. Provide a committee on entertainment who shall welcome new or prospective members or guests at meetings. The officers of the society may be active or ex officio members of such committee. Newly registered physicians should be visited by such committee or written to and asked to join the county society.

14th. Have high ideals. Be liberal, yet firm in maintenance of a high ethical standard. Educate the public. Be a power for good in the community. Do not be ashamed of the county society or apologize for it; make it better. Attend all meetings and see that others do the same. "The county society is a conservator of patriotism and worthy citizenship."—*New York State Journal of Medicine.*

PATCHING OF THE ABDOMINAL AORTA WITH A PIECE OF RUBBER.

Alexis Carrel (*Journal of Experimental Medicine*, Aug. 1, 1911) has already shown that part of an artery can be extirpated and replaced by a patch or a segment of an artery or vein or even peritoneum in a condition of active or latent life, and that the function of the repaired vessel remains normal. It has also been found that when hollow tissues, deprived of life, are grafted on an artery the vessel regenerates itself by using the dead vascular segment as a scaffold. In two recent experiments, Carrel attempted to patch an artery with inorganic and organic foreign substances in order to ascertain whether they can be used in the reparation or in the permanent intubation of large vessels.

The first experiment gave an incomplete functional result, but showed how an artery can reintegrate itself by the use of inorganic material.

Under ether anesthesia a segment of glass tubing of about five centimeters long coated with paraffin was introduced into the abdominal aorta of a dog. The pulsations of the femoral arteries remained normal. Six days after the operation the animal was allowed to run. Paralysis of the posterior limbs developed, and the pulsation of the femoral arteries disappeared. It was thought that the glass tubing had been displaced by the movements of the animal and that coagulation had occurred. Laparotomy was performed, the tube extirpated, and the aortic circulation re-established. The glass tubing was hidden by a soft clot of recent formation, and it was found that the glass wall, inside of which circulation had taken place for six days, was covered by a thin, whitish membrane. A tube having the appearance of a thin-walled artery could be extracted from the glass tubing. Microscopical examination showed that it was composed of a dense fibrin infiltrated by many leucocytes. It is probable that if the dog had been quiet and the glass tubing had not been displaced, the fibrinous tube would have become organized and would have formed inside of the glass tubing a new intima, in the manner of the canalization of a dissecting aneurism.

In the second experiment, a piece of the anterior wall of the abdominal aorta was resected and replaced by a piece of rubber. Three and one-half months later examination showed that the lumen of the vessel was normal. There was neither stenosis nor dilatation at the level of the patch, but the wall was thickened. On the external side or the aorta there was no evidence of the patch, and the adventitia was thicker than normal. The vessel was opened by an incision made on its posterior wall. The intima was smooth and glistening. The location of the resected piece, which appeared as an oblong area, neatly circumscribed, although having about the same appearance as the adjacent parts of the vessel, was easily detected. A longitudinal section showed that the piece of rubber was present

in the wall. On its external side a new adventitia had developed ,while its internal side was covered by a thick layer of intimal tissue.

To summarize, the part of the abdominal atorta extirpated and replaced by a patch of rubber had been regenerated by the adjacent parts of the vessel. The caliber of the aorta extirpated and replaced by a patch of tion had not been impaired. The experiment indicates, therefore, that a foreign inert substance, under certain conditions, does not produce an obliterative thrombosis, but can, indeed, be used in the reparation of the wall of a large artery.—*Therapeutic Gazette.*

AN OPERATION FOR THE CLOSURE OF CLEFT PALATE BY GRADUAL PRESSURE.

Shea (*International Journal of Surgery*, April, 1912), after calling attention to the fact that one may change the character of a person by correcting abnormalities of the face and jaws, states that it is almost a crime to permit deformed patients to go unrelieved. He advises an operation which he states is applicable any time during the first year and preferably during the first six months of life. He passes a needle threaded with strong silk through the superior maxilla at a point just under the malar process, and high enough to be above the palate. By means of this thread the free end of a compression bar is drawn through the bones. This bar is made of gold and platinum wire of about 18 gauge, threaded from both ends toward the center. The length of the bar is adjusted to the case. The bar is held in position while lead gaskets, silver plates, and nuts are adjusted, the plates and gaskets being trimmed to fit the convexity of the buccal surfaces of the bones. Nuts are screwed on the outside of the plates on the bar, with a small wrench, until a slight degree of pressure exists. The surplus ends of the bar are snipped off whenever they protrude sufficiently to interfere with the tissues on the inner side of the cheek. To the anterior end of the silver plates are soldered two small hooks for the purpose of reducing the premaxillary bones when they are involved. This is done by passing a rubber band through a small ring which has been soldered to a piece of silver suitably formed to fit the convexity of the premaxillary bones. The free ends of the rubber band are attached or slipped over the hooks on the anterior portion of the buccal silver plates. He depends upon the pressure from the elastic band to gradually reduce the premaxillary bone. It is often necessary to cut a "V" from the vomer in order to get the premaxillary bone in position.

The length of time required to bring the margins of the cleft in close enough apposotion for scarifying and suturing will depend upon the age of the child and the amount of resistance offered by the osseous tissue—approximately two weeks.

The nuts used on the compression bar are of gold made with a fair-sized flange for the purpose of pressure distribution. When the margins are sufficiently close to scarify and suture the patient is again anesthetized and the closure of the cleft is completed, leaving in position the compression bar to relieve tension until union.

Special attention should be given to the nasal fossae so that there will be no crowding of the parts. The compression bar is flexible and can be removed without anesthetic.

HEMORRHAGE OF THE NEW-BORN.

V. M. Reichard, Fairplay, Md. (*Journal A. M. A.*, October 26), reports a case of severe hemorrhage of a new-born child causing profound shock. About 15 c.c. of normal horse-serum were given subcutaneously in the buttock. Small amounts of blood continued to be passed for two days, and a second injection of 20 c.c. was given about forty-six hours after the first. The stools then became normal, there has been no further hemorrhage and the child is now in perfect health. Reichard remarks that 20 c.c. is a fairly large dose for an infant of this age and puts the skin decidedly on the stretch, but this subsided in half an hour. The second injection was given on the opposite side from the first.

The West Virginia Medical Journal

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notices of deaths, removals from the State, changes of location, etc., are requested.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to members of the medical profession. Name of sender should be given.

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Editorial

OUR FORTY-SIXTH ANNUAL MEETING.

Were you there? If not you missed a great treat. In our May issue we told you that "this is to be the greatest meeting in the society's history." Perhaps this sounded familar, and failed to make the impression that it should have made. But it was a true prophecy founded on fore-knowledge of what was coming. In the numbers of those in attendance it exceeded the famous Clarksburg meeting by about twenty, the total of members and visitors reaching 221. In the number of papers read it excelled all former meetings. In character the papers were up to the highest standard set by former meetings. We had more papers from distinguished visitors than ever before, and these added greatly to the interest of the sessions. It may be thought that these crowded to the rear some of our modest members, but we saw no evidence of a panic in the presence of distinguished men, some of world-wide reputation, and no hesitation to engage in the discussion of the papers read. And we believe that no paper was hindered from being read. The division of the association into sections made it possible to hear papers that would otherwise have been crowded out. On the other hand this division prevented many from hearing papers which they would have been glad to hear and discuss. It likewise deprived the authors of papers on special topics from being heard by the general practitioners, to whom they would have been especially instructive. But the papers can be read in the Journal, and will enrich its pages. The new section on Eye and Ear, etc. made a fine start, and all were highly pleased with the enterprise shown by these specialists.

The presence of the Governor, his fine speech of welcome, his speech in the meetings, and his interesting address at the banquet, added greatly to the enjoyment of the occasion. How many state medical associations have had the presence of a live doctor as member and Governor at the same time? West Virginia is surely to be congratulated on having a man at the head of affairs who, as a practicing physician, knows the needs of the people, and has expressed his determination to do what he can to bring about a betterment in the conditions surrounding them. The profession will be with him in this effort.

President Hupp worked with diligence and self-sacrifice for the success of this meeting, and that he presided with ability, and kept things constantly in motion, all can testify. To his skill and determination as a presiding officer much credit for the success of the meeting must be given.

To the Secretary also much credit is due for his activity in the preparation of the fine program.

The Charleston profession must be credited with their excellent preparations for the comfort and enjoyment of the members and the accompanying ladies. Unfortunately the weather man greatly interfered with their plans, and the ladies chiefly were the sufferers. The elegant reception at the Governor's mansion was largely attended notwithstanding the rain, and was greatly enjoyed by all. Very fittingly the meetings closed with the usual banquet, held at the Hotel Kanawha, and

presided over by our long-time member, Dr. W. W. Tompkins. The menu was O. K., no wine was served, no one missed it, the speeches were up to the standard, those of Drs. Pedersen, of New York, and Smith, of Cincinnati, much above, and all retired with a sense of satisfaction, physical, mental and social.

Some of our members may not be satisfied to go so far as Bluefield next year, but let it be remembered that Bluefield has been coming to us for years, that several live societies exist in the lower end of the state, and that by going down there we can do missionary work, and gather into the society many good men who have not thus far learned the benefits and pleasure to be derived from fellowship with the progressive physicians of the state. The editor looks forward with pleasing anticipations to a visit to Bluefield next May.—*S. L. J.*

DOES SALVARSAN KILL?

Those in attendance at the late meeting of the State Association will recall the fact that the writer stated that at least a hundred deaths from salvarsan were on record. A distinguished visitor replied that this was an error, that the deaths were due to "bad technique." As this is a scientific question of very great importance to the practitioner, it should not be hastily disposed of. As the last hour of the meeting had arrived, the writer was not disposed to weary the members by prolonging the discussion, but he desires here to give some information to which the members may not have access. After leaving the meeting a member who is well informed on the subject informed the writer, that the latest reports indicated that over 140 deaths had followed the injection of salvarsan. No doubt many remain unreported. By no means all of the deaths have occurred in the practice of men ignorant of the proper technique, or careless in the manner of administering the drug. Many prominent German specialists have reported fatal results, among them being Wilhelm Wechselmann, Directing Physician of the Dermatological Department, Rudolph Virchow Hospital, Berlin. This is the distinguished syphilologist to whom Ehrlich first gave the new remedy for purposes of experimentation. His opinion should be worthy of consideration and we are glad to be able to present it to our readers. In the March, April and May issues of *The Urologic and Cutaneous Review* is a study of this subject by this writer, based on quite a number of necropsies of patients dying after the injection of salvarsan. Did these patients die from salvarsan, or as a result of "bad technique"? Let the distinguished writer answer this question:

> "Of all the clouds which have encompassed salvarsan therapy there yet remains one to darken the horizon, but this is the blackest, viz. the foudroyant fatalities in consequence of the intravenous injections of salvarsan. *There can not be the least doubt that these cases are pure salvarsan fatalities; that is, the concerned patients would not have died at the time had it not been for the introduction of salvarsan into their veins.* (Italics ours.)

From the view point of the writer, this is sufficient to settle the question raised in the discussion at the late meeting, and in favor of his contention that salvarsan does kill. But in addition Almkvist and Hedren are quoted as follows by Wechselmann:

> "From this it appears that the unwelcome, severe, and at times even fatal collateral effects following the administration of salvarsan and neosalvarsan, are to be accepted as toxic actions of the introduced drug, and so it seems, principally of its arsenic constituent."

As to the manner of death, W. claims that "insufficiency of the kidney and not hypersensitiveness of the brain, is the point of the entire question of salvarsan fatalities." The overburdened organ is the kidney and not the brain. He adds that we frequently encounter in the literature on salvarsan instances of death occurring with anuria or suddenly appearing albumin. And yet, he says, "as a rule salvarsan is well borne in the presence of nephritis, and only exceptionally are bad results registered. There is apparently offered the contradiction that plainly pathological kidneys stand the full burden of salvarsan without reaction, while seemingly normal kidneys are rendered insufficient." In a recent issue of the *Cleveland Medical Journal* Dr. Ruh reports a case of anuria after an injection of salvarsan, with death after five days. The amount used was 0.5 gramme (7½ gr.). The main effects of the drug he says, "are seen in the kidney and liver, which show degenerative changes and proliferation of the parenchymatous elements.

The pathological changes in the liver and kidney are similar to those produced in experimental arsenic poisoning."

Without enlarging on the subject, our readers will see that "salvarsan does kill," as the writer claimed at the recent meeting of the State Association, and that the killing is at least not always due to "bad technique," as claimed by one speaker.

That salvarsan is a valuable remedy needs no proof from us; but it is a remedy that has been greatly over-rated, and the profession should know that especially when used intravenously it is not free from danger. That the most careful technique is demanded goes without saying; and hence it would be well if its use could be restricted to those having large opportunity to employ it, and who would hence fully understand the remedy and its mode of administration.—*S. L. J.*

POISON IVY.

What doctor does not know of it, and who has not seen or felt the extremely unpleasant results of contact with it? It is well to know more, if the new knowledge promises to be of benefit to the sufferer. Dr. Andrew Wilson has recently permitted us to read a little book on *"Poison Ivy and Swamp Sumach,"* by Annie O. Huntington. From this book we learn that the poison of the ivy resides in a non-volatile oil, and not in an acid, as generally taught. On the acid theory an alkaline wash has long been recommended as the proper treatment for ivy poisoning. Miss H.'s treatment is still more simple, viz., soap, a brush, and plenty of water. To get the best results this remedy should be applied as soon as possible; if before vesiculation occurs the application will be free from pain and a cure will result very quickly, without other treatment. The poison is simply washed away. As the poisonous oil is soluble in alcohol, dilute alcohol may be used instead of water. Remember, however, that since the toxic principle is soluble in the alcohol, the latter "becomes in itself a weak solution of the poison, and will spread the rash unless constantly renewed." The author says that "powdered sugar of lead may be added to the alcoholic wash, or one part of hyposulphite of soda to three parts of water makes another good lotion to apply immediately after exposure." From personal experience, however, Dr. Wilson assures us that a good scrubbing with plenty of soap and warm water leaves nothing to be desired. —*S. L. J.*

FRIEDMANN THE FALLEN.

We have plead for the open mind with reference to the Friedmann cure, just as we would plead for generous treatment for any one offering a remedy for any dread disease. Friedmann came to us after having received not a little encouragement in his native city of Berlin. His remedy there, as in this country, showed some good results in joint and bone tuberculosis, but seems to be a failure in lung disease. The man by reason of his pronounced commercialism, has fallen lower than his remedy. We dismiss him with the last words of the New York Board of Health, which on May 29th, forbade the use of the remedy, and issued this statement:

"Certain tests of the alleged cure for tuberulosis being made are rendered unsatisfactory, unscientific and practically futile through the insistence of the originator on conditions which involve inadequate observation, inaccurate methods of administration and the insistence on secrecy regarding the substances employed in some phases of the treatment. Evidence is at hand to show that the so-called 'remedy' not only does not fulfill the promises of efficiency and safety under which its use was at first permitted in this city, but many patients have suffered serious and unduly rapid progress of their disease."—*S. L. J.*

MORPHINE, COCAINE AND ALCOHOL.

We call the attention of the profession to the "ad" of Dr. J. W. Williams of Richmond, Va., in this number of the Journal, as to the treatment of Morphine, Cocaine and Alcoholic addiction. This New Treatment, based upon the findings of the Opium Congress of China, is upon the very highest plane of Medical ethics; has no connection whatever with the "Sanitoria" and "fake cures" scattered throughout the country, and claims 85 per cent of cures—the highest per cent yet attained by medical science in any part of the world. Unfortunately not a few physicians have fallen into the bad habit of using dope of various kinds. Dr. Williams offers to treat all such without cost as to his peronal fee.

The Sawyer Sanatorium is offering a special course this summer for "deficient" and "backward" children. It begins June 16th and closes August 25th.

Their intention is to thoroughly examine all those coming for the work, and then to treat them physically as their needs demand. They in-

tend to give the pupils the advantage of their extensive treatment equipment, and hope thereby to help many that otherwise can not be made better. They also expect to give the child careful attention in such school work as he or she can take up. A competent teacher with years of experience will be in charge of the pupils at all times.

The children will also have the advantage of outdoor life on the Farm. They will play in the woods, work in the garden and be in the open as much as possible. In fact, the course will be an ideal one in every way. All kinds of stunted, backward and deficient children will be treated, from two years of age up. No matter what their condition is, we will try to help them.

State News

REMOVALS—Dr. E. D. Tucker from Wallace to Parkersburg. Dr. Hugh W. Neel from Glady to Spruce. Dr. C. A. Martin from Harvey to Robinnette. All in West Virginia.

The Sheltering Arms Hospital Training School for Nurses graduates a class of two on the seventh of June, viz. Misses Fannie N. Hodges and Sadie E. Timberlake.

We are glad to note that Dr. G. Timberlake, formerly a West Virginian and now of Baltimore, has recently been advanced to a full professorship of Genito-urinary Diseases in his Medical School.

Society Proceedings

MINUTES OF THE FORTY-SIXTH ANNUAL SESSION of the West Virginia State Medical Association, Held in Charleston, May 21, 22 and 23, 1913.

General Session—Wednesday, May 21, 9:30 a. m.

Called to order by the President, Dr. Frank LeMoyne Hupp.

Invocation by the Reverend R. D. Roller.

Address of welcome, on behalf of the city, by Mayor J. F. Bedell, and on behalf of the State, by Governor H. D. Hatfield, M. D.

President Hupp then delivered his address. (*See page* 399.)

Drs. Tompkins, Weirich and Sites were appointed a committee to consider the recommendations contained in the presidential address and report to the House of Delegates.

Dr. A. V. Weinberger read a paper entitled *"Toxemia of Pregnancy."*

Discussion opened by Dr. Sharp, who was followed by Dr. Jepson.

Dr. Dupuy asked if any one had used alkalies in treatment of impending eclampsia.

Dr. Henry advises that too much dependence be not placed on presence or absence of albumin in urine.

Dr. Venning thinks we should differentiate between varities of toxemias.

Dr. Butt called attention to the fact that there had been no advances in the treatment of this condition nor was there any unanimty of opinion regarding its causation.

Drs. Covert, Thornton, Weirich and MacQueen also took part in the discussion.

Adjournment.

Wednesday, 2:15 *p. m.*

Called to order by President Hupp.

A paper on *"Early Extrauterine Gestation"* was read by Dr. S. L. Jepson.

Dr. S. B. Lawson read a paper on *"Abdominal Pregnancy,"* (with exhibition of a five months' fetus removed from abdomen.)

"Cesarean Section," by Dr. H. H. Carr, was the next paper.

"A Case of Cerebral Haemorrhage," was the title of Dr. E. S. Dupuy's paper.

Owing to the employment of a stenographer the secretary made no notes of those who participated in the discussion. Unfortunately the stenographer failed to complete her notes.

Adjourned at 4:30.

Dr. C. A. L. Reed, of Cincinnati, delivered the public address at 8:30 p. m. Title; Marriage and Eugenics in Race Culture. A large audience was present and the lecture was greatly enjoyed.

Thursday, May 22nd.

The papers on the program for Thursday were read in the sections on Surgery, on Internal Medicine, and the section on Ophthalmology, Laryngology, Otology and Rhinology.

The only paper read in general session was that of Dr. Smith Ely Jelliffe of N. Y. "The Psychoneuroses, Their Understanding and Treatment." Discussed by Drs. Wingerter, Diller, Beebe and Bloss.

Adjourned.

MINUTES OF SURGICAL SECTION—The orator, Dr. R. E. Venning, was elected chairman of the section. Title of his oration was, "Carcinoma of Stomach From a Surgical Standpoint."

In discussing the oration Dr. Burns laid stress on early diagnosis; should be made before there is anything discoverable on palpation. In his experience those tumors lying near the pylorus are best suited to operation. A radical operation with posterior anastomosis gives patient best chance of relief.

Dr. Quimby states that 90 per cent of ulcers can be diagnosed by the X-Ray. Gave details of administering bismuth meal.

Dr. Golden spoke of need of education in the *early* diagnosis of cancer. Thinks medical schools should make special point to educate students along this line. Related personal experience gained on examining board. Applicants as a rule gave late symptoms instead of early.

Dr. Edmundson thinks there is often stasis without cancer. Reports case.

Dr. J. E. Cannaday read a paper on "Rupture of the Liver."

Dr. Bonar reports a case of supposed rupture of liver which recovered without operation.

"Importance of Early Recognition of Surgical Lesions of the Liver and Bile Ducts" was read by Dr. Chester R. Ogden.

Dr. W. S. Fulton read a paper on "The Dislodged Kidney." Discussed by Dr. Burns.

"The X-ray and Its Possibilities in Scientific Research" was the title of a paper by Dr. R. H. Pepper. Discussed by Dr. Quimby.

Dr. Jas. Bloss read a paper on "The Indications for, and Prognosis of, Surgical Procedures in Epilepsy."

Discussed by Dr. Quimby, who reports cases of boy hit in head by stone. Twitching of one arm soon after injury. X-ray showed depressed fracture. X-ray does not usually show much in head injuries.

Dr. T. K. Oates read a paper entitled "Local Anesthesia in the Radical Cure of Hernia."

Dr. S. B. Lawson advises addition of adrenalin to anesthetic solution. Often uses 2 per cent solution of bisulp. quinine. This can be boiled; anesthesia also lasts longer; as much as one hour in skin; may cause necrosis if too much is injected.

Dr. Rodgers spoke of the comparative safety of anesthetics. Believes that many deaths occur which are never reported. Thinks one advantage in local anesthesia is that it makes a more careful surgeon.

Dr. Butt thinks all anesthetics have their disadvantages; cites their multiplicity as proof of this. Thinks each operative case should be treated according to its needs. Uses a good deal of spinal anesthesia; likes it especially well in abscess cases of appendicitis, where struggling might cause rupture. Local anesthesia only for those men who like it and have a large stock of patience in its application.

Dr. Grimm thinks quinine and urea satisfactory agents for local anesthesoia.

Dr. Ogden spoke of the psychic effect. Thinks we will all eventually go back to general anesthesia.

Closed by Dr. Oates, who says that sloughing ing is most likely due to imperfect sterilization.

Paper on "Early Diagnosis and Treatment of Malignant Tumors" was read by Dr. J. Edward Burns. Discussion opened by Dr. C. R. Ogden.

Early diagnosis by far the most importance in Dr. Ogden's opinion. Praises the work of Woods Hutchinson. Thinks his articles will do much to educate the people. Reports two cases of lives lost through ignorance.

Dr. Rodgers advises that all tumors of the breast be removed surgically. Reports two cases coming under his observation in which a cancer of the uterus had been treated first by Lydia Pinkham, then by suppositories, thereby allowing the period of operability to pass. Thinks all lacerations of cervix should be repaired. Advises against the removal of the *entire* breast if seen *early*. In these cases unnecessary to remove everything.

Dr. Golden reports as a curiosity a case in which nine years ago a miscroscopical examination showed cancer of the uterus to be present. Patient refused operation, still livng and in good health. Offered a resolution asking medical schools to give more atention to the *early* diagnosis of malignancy. Carried.

Dr. Venning thinks all depends upon education; illustrates its good effects by what has been accomplished in appendicitis. Formerly he operated on many cases in which peritonitis had developed; now most of his cases are seen early. Thinks many could be operated *before* the development of cancer. Urges the family practitioner to be present at operation in order to see the "living pathology."

Closed by Dr. Burns.

MINUTES OF SECTION ON INTERNAL MEDICINE.—The section on Internal Medicine convened in the Senate Chamber on Thursday, May 22, at 9:15 a. m. The section was called to order by Doctor Halterman, who nominated Dr. S. L. Jepson as chairman. He was elected unanimously and appointed Dr. Charles Wingerter, Secretary. Dr. A. A. Shawkey read the Oration in Medicine on the "Conservation of Natural Resources."

Announcements were made by the President of the Society, at this point, that all the sections would assemble at two o'clock in the afternoon in the House of Delegates to listen to a paper by Dr. S. E. Jelliffe, of New York, on "The Psychoneuroses, Their Understanding and Treatment;" and that Dr. Quimby, of Wheeling, had for inspection in the buildng an instructive X-Ray exhibit.

A paper was then read by Doctor C. W. Halterman on "Cerebral Arteriosclerosis," and one on "The Pulse," by Dr. Charles O'Grady. Freely discussed.

Dr. A. Mairs read a paper on "Pellagra, With Report of Cases." Dr. Nunemaker said he thinks a great many cases of this condition are being overlooked in West Virginia. He knows of five cases in one small community. Dr. Halterman emphasized the need of greater study of the disease.

A paper was read by Dr. M. McNeilan on "Necessity of Greater Care in Diagnosis and Treatment of Rheumatism." This was followed by a paper on "Etiology and Classification of Rheumatism" by Dr. O. F. Covert. The discussion on these papers was postponed until after dinner.

Before adjournment Dr. Guy Yost read a paper on "Constipation from the Proctological Standpoint."

The afternoon meeting of the session opened again at 3:45, Dr. Tompkins being in the chair. Discussion of the papers on rheumatism was invited and was opened by Dr. Halterman who was followed by Drs. Wise, Sharp, McNeilen and Covert.

Dr. Thornton read a paper on "Some Considerations in Life Insurance Examinations." Dr. Dickey said he has made over 6,800 examinations. The work of examiners is under scrutiny for many years, and should be well paid. Companies are paying less attention now to family histories. He believes, however, that family history is most important. It is important to keep applicant from talking too little or talking too much. Some cases of advanced nephritis show no albumen. Suspected cases should be examined microscopically. Dr. Wise notes that more attention is going to be paid hereafter to blood pressure. He believes that cases of low pressure are more liable to develop tuberculosis. It is very difficult to get correct history concerning alcoholic habits and venereal disease. Dr. McDonald noted some agents do not en-

courage careful examinations. Dr. Sharp deprecated the tendency of companies to underpay physicians, and to require gratuitous information. He finds it very difficult to get accurate alcoholic history. Dr. Henry emphasized the need of verifying statements of patients in certain instances. Dr. Thornton closed the discussion. He thinks it will be many years before blood-pressure estimation will be generally used.

A paper on "Observations on Diphtheria," by Dr. McLain, was read by Dr. Andrew Wilson.

A paper by Dr. Lind on Typhoid Fever, followed this.

On motion, the section adjourned.

FRIDAY, 10:35 A. M.

The Association convened in general session. Dr. S. L. Cheney read a paper on "The present Status of the Wasserman Test." In the discussion Dr. E. O. Smith advised that the test be used as a check on treatment.

Dr. A. Wilson said we should have a good man make the test and then accept his conclusions with some reservation.

"The Relation of the Nasal Accessory Sinuses to One Another" was the title of a paper read by Dr. John W. Murphy of Cincinnati. Discussed by Drs. Aschman and Link.

Dr. W. W. Golden not having completed his paper on "A Possible History of Medical Legislation in West Virginia, 1903 to 1907," made a few remarks on the subject and promised to have his paper ready for the Journal at a later date.

Dr. W. A. McMillan's paper on "The Need of State Sanitary Inspection" was discussed by Dr. F. V. Beitler, Chief of the Bureau of Vital Statistics of Maryland, Dr. A. Wilson of the Health Department of Wheeling, Dr. Sharp and Governor Hatfield.

Adjourned.

FRIDAY, 2:11 P. M.

Called to order by President Hupp.

Dr. J. E. McDonald read a paper entitled "Commercialism vs. Ethics." Discussed by Drs. Jepson, Robins, Henry and Peters.

"Management of Syphilis from the Modern Viewpoint" was read by Dr. Victor Pedersen of New York.

Dr. Burns asks if neo-salvarsan has any advantage over salvarsan.

Dr. Jelliffe emphasizes great importance of syphilis in treatment of nervous system. Fifteen per cent of syphilitics develop it in nervous system. Declares treatment by mouth will never stop syphilis of the nervous system. Dr. Tomkins asks what forms of mercury and iodid are used by the essayist.

In closing the discussion Dr. Pedersen said he used neo-salvarsan but little. He is waiting until Ehrlich finishes his experiments. By withholding food for twelve hours afterwards and using cathartics, he fears the toxic effects of these arsenic preparations but little. Prefers by all means intravenous injections. Uses intramuscular injections of salicylate of mercury, 66⅔ per cent of the salt in liquid albolene combined with lanolin. Uses alkalies, usually bicarbonate of soda.

A paper on "Surgical Treatment of Goiter" was read by Dr. Andre Crotti of Columbus, O.

Discussed by Dr. Deaver.

Dr. E. O. Smith of Cincinnati, O., gave an address on "Urological Diagnosis Illustrated with Lantern Slides."

Discussed by Drs. Pedersen and Sharp.

"Some Considerations in Pathology, Diagnosis and Treatment of Malignant Tumors of the Breast" was the title of a paper read by Dr. John B. Deaver of Philadelphia.

Discussed by Drs. Crotti, Pedersen, Jepson, Wise and Fulton.

On motion Drs. Smith Ely Jelliffe, Victor Pedersen, John W. Murphy, Andre Crotti and John B. Deaver were elected honorary members of the Association.

A vote of thanks was extended to the Kanawha Medical Society for having entertained the Association so handsomely.

Adjourned at 5:30.

FRANK L. HUPP, *President.*

A. P. BUTT, *Secretary.*

MINUTES OF THE SECTION ON EYE, EAR, NOSE AND THROAT.

The Section was called to order by the temporary chairman, Dr. G. A. Aschman, with the following members present:

Drs. G. A. Aschman, John L. Dickey, Ivan Fawcett and E. H. Oesterling, Wheeling; V. T. Churchman, P. A. Haley and L. C. Covington, Charleston; T. W. Moore, Huntington; C. F. Mahood, Alderson; H. H. Haynes, Clarksburg; W. S. Link, Parkersburg, and H. R. Johnston, Fairmont.

Dr. J. W. Murphy of Cincinnati was a visitor and took part in the discussions.

The minutes of the called meeting in Wheeling were read by the temporary secretary, H. R. Johnson, and approved.

On motion of Dr. V. T. Churchman, the temporary officers were retained until the close of the Section meeting, when permanent organization would be formed.

The following papers were read and freely discussed:

Report of 100 Cataract Operations—Dr. John L. Dickey, Wheeling.

Albuminuric Retinitis—Dr. L. C. Covington, Charleston.

Etiology of Milium—Dr. G. A. Aschman, Wheeling.

Mastoid Surgery—Dr. H. E. Oesterling, Wheeling.

Earache—Dr. T. W. Moore, Huntington.

Chronic Suppuration of the Middle Ear—Dr. H. R. Johnson, Fairmont.

Sub-Mucous Resection of the Nasal Septum—Dr. V. T. Churchman, Charleston.

Present Status of Tonsil and Adenoid Surgery—Dr. Ivan Fawcett, Wheeling.

Inflammation of the Nasal Accessory Sinuses—Dr. H. H. Haynes, Clarksburg.

Nasal Headaches (read by title)—Dr. E. A. Hildreth III, Wheeling.

Some Complications of Acute Otitis Media (read by title)—Dr. M. B. Kelley, Wheeling.

Purulent Ophthalmia (read by title)—Dr. E. R. McIntosh, Elkins.

On the completion of the scientific program,

the following officers were elected for the ensuing year:

Chairman of the Section—Dr. V. T. Churchman, Charleston.

Secretary—Dr. H. R. Johnson, Fairmont.

Executive Committee—T. W. Moore, Huntington; John L. Dickey, Wheeling; J. M. Sites, Martinsburg.

On motion of Dr. Churchman, the Executive Committee was instructed to act in conjunction with the Chairman in arranging Symposium for the 1914 meeting, and that an abstract of all papers be placed in the hands of the Secretary for publication and distribution not later than 30 days prior to the meeting.

On motion, the meeting adjourned.

This Section has been launched under the most promising circumstances, and is destined to become one of the most important arms of the State Association.

All present at the Section meeting are enthusiastic boosters for a better and bigger meeting next year.

H. R. JOHNSON,
Secretary of Section.

Physicians Registered

F. L. Hupp---Wheeling
A. P. Butt---Davis
H. P. Linsz---Wheeling
G. C. Rodgers---Elkins
G. A. MacQueen---Charleston
V. T. Churchman--Charleston
E. S. Dupuy---Summerlee
P. J. McElrath---Bramwell
T. M. Haskins---Wheeling
J. M. McConihay --Charleston
W. S. Link---Parkersburg
A. P. Jones---Pennsboro
G. D. Lind---Greenwood
B. B. Wheeler ---McKendree
J. A. Dye---Ravenswood
R. F. Farley---Logan
G. A. Aschman---Wheeling
A. V. Weinberger---Wheeling
C. W. Halterman--Clarksburg
H. D. Hively---Charleston
I. N. Houston---Moundsville
J. E. McDonald---Logan
J. H. Steenbergen-Huntington
Milton McNeilan-Parkersburg
A. A. Shawkey ---Charleston
O. F. Covert ---Moundsville
C. G. Morgan ---Moundsville
J. J. Duffy---Glen Easton
W. P. Bonar---Moundsville
H. H. Pettry---Lawson
R. E. Venning--Charles Town
Jas. Putney---Charleston
W. W. Tompkins--Charleston
G. C. Schoolfield---Charleston
C. L. Holland---Fairmont
H. D. Hatfield---Eckman
W. G. Drinkwater--Gormania
T. E. Romine---Charleston
J. H. Craft---McComas
L. W. Leonard---Dana
J. E. Robins---Charleston
L. R. Harless---Glen Ferris
W. T. W. Dye---Grantsville
C. O. Henry ---Fairmont
M. O. Hess---Longacre
H. C. Sarver ---Charleston
Chas. O'Grady---Charleston
J. E. Cannaday---Charleston
Wm. A. McMillan--Charleston
P. L. Gordon---Charleston
B. S. Preston---Charleston
L. C. Covington---Charleston
Jas. A. Cox---Morgantown
S. M. Steele---Weston
W. H. St. Clair---Bluefield
J. B. Kirk---Elk Horn
R. K. Bragonier---Keystone
O. S. Hare---Bluefield
S. B. Lawson---Logan
W. B. Wilson---Charleston
T. H. Eliott---Gauley Bridge
M. Mendeloff---Charleston
R. A. Ireland---Charleston
H. H. Young---Charleston
F. B. Murphy---Philippi
John N. Simpson-Morgantown
E. A. Davis---Charleston
Tunis Nunemaker-Williamson
G. T. Conley---Williamson
T. K. Oates---Martinsburg
W. H. Sharp---Parkersburg
J. McK. Sites---Martinsburg
H. L. Robertson---Charleston
W. F. Shirkey---Charleston
C. R. Weirich---Wellsburg
S. L. Jepson---Wheeling
W. H. Triplett---Thacker
J. T. Sharp---Charleston
T. W. Hopkins---Fayetteville
C. M. Scott---Bluefield
U. G. Cook---Beckley
James Cooper---Cameron
W. H. Wilson---St. Albans
L. Miller---Meadow Creek
H. R. Johnson---Fairmont
J. E. Coleman---Beckley
T. C. McClung---Ronceverte
Jim McClung---Richwood
J. W. Moore---Charleston
Richard T. Davis---Charleston
E. V. Beitler--Baltimore, Md.
G. D. Kahlo-White Sul. Sp'ngs
J. T. Thornton---Wheeling
C. E. Copeland---Charleston
J. S. Shaffer---Cannelton
H. J. Cherry---Coalton
G. W. Wentz---Chester
A. S. Grimm---St. Marys
W. A. Quimby---Wheeling
W. S. Fulton---Wheeling
C. A. Walker---Lanesville, O.
M. T. Morris---Sutton
F. F. Farnsworth-French Creek
R. E. Pepper---Huntington
B. Robinson---Parkersburg
J. A Guthrie---Huntington
J. L. Dickey---Wheeling
A. Wilson---Wheeling
T. M. Moore---Huntington
E. B. Gerlach---Huntington
W. C. McCord---Huntington
N. E. Neal---Huntington
H. M. Campbell--Parkersburg
R. H. Edmundson-Morgantown
B. W. Eakin---Carlisle
C. F. Mahood---Alderson
W. W. Golden---Elkins
J. R. McCollum---St. Marys
V. H. Casto---Ripley
A. K. Kessler---Huntington
C. R. Ogden---Clarksburg
C. F. Hicks---Welch
E. F. Peters---Maybeury
J. H. Anderson---Marytown
J. H. McCulloch---Welch
J. B. Lockridge---
Minnehaha Springs
H. E. Oesterling---Wheeling
Ivan Fawcett---Wheeling
H. B. Jones---Wheeling
J. E. Burus---Wheeling
C. A. Reay---Charleston
S. H. Wise---Parkersburg
H. H. Haynes---Clarksburg
S. L. Cherry---Clarksburg
J. R. Bloss---Huntington
J. E. Rader---Huntington
Chas. L. Moore--Upper Tract
Jno. W. Murphy-Cincinnati, O.
Theodore Diller-Pittsburg, Pa.
N. R. Price---Marlinton
L. L. Aultz---Charleston
H. C. Skaggs---Kay Moore
M. V. Godbey---Charleston
A. L. Amick---Charleston
J. Ross Hunter---Hansford
H. J. Campbell---Huntington
J. E. Musgrave---Handley
H. C. Solter---Huntington
C. B. Preston---Kingston
D. J. Simmons---Buffalo
E. R. Hatfield---Charleston
S. P. Peck---Hinton
H. G. Nicholson---Charleston
Altu Mairs---Charleston
G. B. Capito---Charleston
P. A. Haley---Charleston
James Cooper---Cameron
G. D. Jeffers---Parkersburg

I. B. Bullard-------Charleston
J. H. Hansford----------Pratt
Guy Yost----------Huntington
N. M. Yost--------Huntington
F. J. Bronhart---Montgomery
Chas. A. Wingerter--Wheeling
W. N. Haynes--------Boomer
O. L. Aultz--------Charleston
L. L. Carr-----New York City
Smith Ely Jelliffe----------
New York City
W. B. Hughey-----Charleston
W. S. Robertson---Charleston
I. P. Champe------Charleston
L. H. Jarrett-------Charleston
C. N. Watts--------Charleston
B. F. Beebe-----Cincinnati, O.
W. B. Robertson------Quincy
H. L. Robertson----Charleston
J. S. Morris--------Charleston
W. D. Williams----Charleston
E. D. Stump-------Charleston
A. M. Reed--------Charleston
G. H. Barksdale----Charleston
W. B. Wilson------St. Albans
S. H. Phillips------St. Albans
C. V. Gautier------Frametown
I. C. Hicks--------Huntington
B. F. Hicks--------Terra Alta
E. B. Gerlach-----Huntington
W. C. McCord----Huntington
J. A. Guthrie------Huntington
W. E. Neal-------Huntington
D. F. Pauley----------Jeffrey
R. D. Roller, Jr--------Eccles
Jos. Mayer--------Charleston
H. C. Jones----------Logan
S. S. Staunton-----Charleston
J. J. Cartley--------Baltimore
C. F. Holden-------Charleston
A. C. Lambert-------Winfield
J. F. Wilcox-------Charleston
L. O. Rose-------Parkersburg
W. F. Harless--------Clothier
E. Otis Smith---Cincinnati, O.
G. R. White-----Barboursville
K. M. Jarrell-----Clear Creek
W. R. Hughey-----Charleston
G. W. Lemon------Claremont
D. G. Preston-------Burnsville
J. W. Ashby----------Carbon
A. M. Reid--------Charleston
Chas. S. Barlow------Spencer
Victor Pedersen----N. Y. City
C. A. L. Reed---Cincinnati, O.
J. A. Chafin--------Big Creek
G. S. Heartley----------Eagle
G. M. Sturgell--------Danville
Andre Crotti----Calumbus, O.
Jno. H. Murphy-Cincinnati, O.
John B. Deaver----Phila., Pa.

Total, 219.

THE CABELL COUNTY SOCIETY.

Huntington, W. Va., April 12, 1913.

The regular monthly meeting of this society was held in the Hotel Frederick Thursday evening.

The paper for the evening was delivered by Dr. J. W. Parsons, a member of the Huntington Dental Association. The subject was "A Little Talk on Dentistry with Some Suggestions to the Physicians." This paper is not only very interesting but also valuable for physicians. A motion was passed asking Dr. Parsons to kindly permit the Editor of the West Virginia Medical Journal to publish this paper. Members of the Dental Society were the guests of the Medical Society.

A protracted discussion of the Friedmann treatment occupied a portion of the evening and motions were passed directing that a statement of the unproven worth, as yet, of this treatment be prepared for the daily press ;also one asking that in the future physicians' names be omitted from the papers except where it is a legitimate feature of the news item. Fraternally yours,

Jas. R. Bloss, Sec'y.

LITTLE KANAWHA AND OHIO VALLEY MEDICAL SOCIETY.

Parkersburg, W. Va., April 18, 1913.

Editor W. Va. Medical Journal:

A called meeting of the L. K. and O. V. Medical Society was held in assembly room of the Chancellor Hotel, March 28, and action taken by the Society in regard to the flood sufferers. The Society voted to extend the services of its members to the mayor and council in any way they might be needed and Dr. W. S. Link, President of Society, was requested to confer with the mayor relative to the situation. Dr. S. D. Wise was appointed to act with the City Health Officer in attending any sick that should be in the various houses of refuge, such as the Lyon Tabernacle. The Society voted to supply all medicines needed. M. R. Stone,

Secretary

May 2, 1913.

The L. K. and O. V. Medical Society did not hold its meeting at usual time in April, owing to disturbances from the flood conditions, but met April 10, Dr. Link, President, in chair. There were sixteen members present. The essayist of the evening, Dr. B. O. Robinson, read a carefully prepared and instructive paper on "Puerperal Eclampsia," reporting a late case, where the patient and twin children were saved. After which the members discussed the subject as to best treatment, after which there were verbal reports of cases from members present. The Society elected Drs. L. F. Keever, Stone and McNeilen delegates to the May meeting of the State Society, also selected alternates.

May 1 the Society met at the Chancellor Hotel, Dr. Link, President, presiding. Twelve members present. Dr. Fisher, essayist, was not able to be present. Dr. Wise, the other essayist, gave us a talk on the use of some of the older forms of treatment of a number of conditions which were overlooked in these days. The doctor is overwhelmed by the multitude of new remedies offered us from the manufacturing pharmacists, chemists and biological firms here at home or those which come to us with the endorsement "Made in Germany."

Among others, he dwelt especially upon his experience in the treatment of epithelioma of the skin, by use of caustic pastes, especially the arsenical pastes ;also on the use of dry cupping in painful neuralgias and myalgias, as taught long before Bier rediscovered it and renamed it the "hyperaemic treatment."

After which there was a general discussion of various remedies formerly used with benefit. Dr. Sharp told of the latter days of the era of venesection, and incidentally of cases when he had derived good results from general and local blood letting, where used with care and discretion. Other members reported cases of interest. After a pleasant session adjourned it was decided to have a dinner at our meeting in June, before the meeting. During the summer months we hold no sessions. Yours,

W. H. Sharp

MERCER COUNTY SOCIETY.

The Mercer County Medical Society met in the Chamber of Commerce rooms in Bluefield on Saturday, April 19. Twenty-nine members were present. Two new members were elected and six applications for membership received, and referred to the Board of Censors.

The following program was carried out:

"The Recognition of the Different Periods of Gonorrhea by the Microscope," Dr. H. G. Steele.

Paper, title not announced, Dr. W. W. Harlowe.

"Subject for Thought," Dr. W. F. Barger.

"Report of a Case," Dr. C. M. Scott.

A "Dutch lunch", was served, given by the physicians of Bluefield.

The membership of the Society now numbers forty-eight. Our next meeting will be held at Princeton on the evening of May 31.

Yours truly,
Chas. T. St. Clair, Sec'y.

GREENBRIAR VALLEY SOCIETY.

This Society held its last meeting at Ronceverte on May 20, at 8 p. m. The program called for the election of new members, papers to be read, this to be followed by a banquet. A ringing call for the meeting was issued by President N. R. Price and Secretary T. C. McClung. We quote:

"Much has been accomplished by the West Virginia Medical Association, but as yet not half the physicians of the state are active members This ought not so to be. The privilege of acquaintance with the best medical and surgical talent of this and other states; eligibility to membership in American Medical Association; a first-class medical journal (West Virginia Journal); civil protective feature in the courts —and the total annual fees are only four dollars. Join the Association, attend its meetings when possible, and let your influence be felt in the administration of its policies, and your voice heard in the discussion of medical practice and theories. You will become better acquainted with your brother physicians, more tolerant of methods differing from your own, and the spirit of mutual helpfulness and good feeling among physicians will prevail, a consummation to be hoped for N. R. Price, Pres.

T. C. McClung, Sec'y."

(We are glad to say that we now have over half the physicians of the State in our medical organizations.—Editor.)

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